

CONFERENCES (C)

C-01

ESOFAGECTOMIE CU LIMFADENECTOMIE TORACOSCOPICĂ PRINTR-UN TRIPLU ABORD MODIFICAT ȘI ASCENSIONARE GASTRICĂ ASISTATĂ LAPAROSCOPIC - CONSIDERAȚII TEHNICE

ESOFAGECTOMY WITH THORACOSCOPIC LYMPHADENECTOMY BY MODIFIED TRIPLE APPROACH AND LAPAROSCOPIC ASSISTED GASTRIC PULL-UP - TECHNICAL CONSIDERATIONS

S. Constantinoiu¹, D. Predescu¹, A. Constantin¹, Mihaela Ungureanu², A. Caragui¹, F. Achim¹, P. Hoară³, M. Boeriu⁴, M. Gheorghe⁴, A. Moraru⁴

¹Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Spitalul Clinic „Sf. Maria”, Clinica de Chirurgie Generală și Esofagiană, București, România

²Spitalul Clinic „Regina Maria”, ATI, București, România

³Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Spitalul Clinic „Regina Maria”, Clinica de Chirurgie Generală și Esofagiană, București, România

⁴București, România

Introduction: The minimally invasive approach is recommended in esophageal cancer surgery, providing better visibility and greatly reducing parietal trauma, especially in case of thoracic approach. The method may be limited by the presence of pleural adhesions or post radiotherapy fibrosis and also by the operating team experience. The technique chosen depends on preoperative staging (upper endoscopy with biopsy, computed tomography, esophageal endoscopic ultrasonography) and tumor localization.

Material and Method: We present details of the operative technique of the first cases. During thoracoscopy, the section of the azygos vein with a vascular stapler was practiced, and thoracic esophagus dissection and mediastinal lymphadenectomy were performed using the monopolar hook electrode and different vessel sealer. Laparoscopic gastric mobilization was performed by cutting the coronary pedicle with a vascular stapler, lymphadenectomy in the celiac plexus and preserving as the vascular pedicle of the graft the right gastroepiploic pedicle. The esophageal section was performed at the cervical level with the extraction of the esophagectomy specimen through an epigastric mini-laparotomy. For middle and superior tumors, we mobilize the entire stomach after the Nakayama technique and for the inferior and eso-gastric tumors, we cut the small curvature and practice a gastric pull-up with a tubular stomach following the Akiyama technique. The practice of a pyloroplasty is often optional, whereas the insertion of a feeding jejunostomy is the rule.

Conclusions: The postoperative evolution and recovery of patients is much better, with oncologic results similar to the open technique, fully justifying the minimally invasive approach in esophageal cancer.

C-02

MANAGEMENTUL ÎN DIVERTICOLUL EPIFRENIC ESOFAGIAN

MANAGEMENT OF ESOPHAGEAL EPIPHRENIC DIVERTICULA

G. Zaninotto

Londra, Marea Britanie

Epiphrenic esophageal diverticula (ED) are a rare disease. Main symptoms are regurgitation, dysphagia and eventually

respiratory symptoms. Data from literature do not have often a high level of evidence because mainly case series or case reports are available. Even if a linear correlation between symptoms and size of ED has not been soundly proven, it is a common clinical finding that large ED are more often symptomatic. Some studies have evidenced how patients with mildly or no symptomatic ED will not experience a worsening in their symptoms over the time; on the contrary moderately or strongly symptomatic patients will tend to progress. Surgery, conducted now a day through a minimally invasive access, has gained high rate of success with extremely low rate of recurrence. However surgery is burdened by a not negligible incidence of complications, in particular the suture line leakage. Given these assumptions, surgery is justified only in symptomatic patients, reserving to asymptomatics or minimally symptomatics a conservative approach with a clinical follow-up, proton pump inhibitors administration or endoscopic pneumatic dilation. When performed surgery should comprise both diverticulectomy and treatment of underlying motor disorders, even if not demonstrable with the current technology. Different mini-invasive approaches may be used (laparoscopy alone, laparoscopy with thoracotomy, laparoscopy with thoracoscopy either with a right lateral or prone position).

C-03

AVANTAJE ȘI DIFICULTĂȚI ÎN CHIRURGIA LAPAROSCOPICĂ PANCREATICĂ

ADVANTAGES AND DIFFICULTIES IN LAPAROSCOPIC PANCREATIC SURGERY

I. Khatkov, R. Izrailov, P. Tyutyunnik, M. Baychorov, A. Khisamov, A. Andrianov, M. Mikhnevich

Moscova, Rusia

Background: Two hundred and fifteen laparoscopic pancreatoduodenectomies were performed by single surgical team. The objective is to assess the short-term and long-term results of this operation performed in patients with pancreatic head and periampullary area diseases.

Methods: Treatment results of 215 patients underwent laparoscopic pancreatoduodenectomies were analyzed to evaluate short-term outcomes including blood loss, operative time, postoperative pancreatic fistula rate, postoperative complication according to Clavien-Dindo. Oncological outcomes of cancer patients were analyzed to evaluate long-term results. Among 215 patients 122 were females and 93 were males. Mean age was 60 years (range 32-82). 188 patients were operated on because of malignancies and 27 because of benign diseases.

Results: Mean operative time was 427 (range 240-875) min and mean blood loss was 400 (range 10-2100)ml. Clinically relevant postoperative pancreatic fistulas (POPF) were diagnosed in total of 14,8% patients, among them 12,1% were classified as grade B POPF and 2,7 as grade C. Postoperative course of 35,5% of patients was complicated by Clavien-Dindo IIIa-V complication. Among them IIIa – 21,9%, IIIb – 7%, IV – 0,45%, V – 5,6%. R0 was achieved in 94% of cases, mean number of harvested lymph nodes was 17. 70 patients with pancreatic ductal adenocarcinoma were followed up. 3-years overall survival rate (OSR) was 31,3%, 5-years OSR was 25,2%. Median survival time was 22,5 months. Among patients with papillary cancer, 31 patients were followed up. Both 3-years and 5-years OSR were 67%.

Conclusion: Totally laparoscopic pancreaticoduodenectomy is safe and effective procedure for patients with pancreatic head and periampullary area diseases

C-04

GASTRECTOMIA LAPAROSCOPICĂ PENTRU CANCER GASTRIC: TEHNICĂ ȘI EVIDENȚE

LAPAROSCOPIC GASTRECTOMY FOR GASTRIC CANCER: TECHNIQUES AND EVIDENCE

K. Young-Woo

Goyang, Coreea de Sud

After the first laparoscopy-assisted distal gastrectomy (LADG) for early gastric cancer was performed in 1991 in Japan, Korean surgeons were slow to accept at the first time because radical D2 gastrectomy had been accepted as a standard surgery at that time, laparoscopic surgery was just naïve looking for skilful gastric surgeons in Korea. How about now? When we saw 2014 statistics in Korea, over 50 % of all gastrectomies in Korea were done laparoscopically. Personally, I started laparoscopic gastrectomy and demonstrated video for the first time at the Korean Surgical Society meeting in 1999.

During 18 years I have done more than 2,000 laparoscopic gastrectomies! What happened during last less than 20 years? We have developed gradually state of art surgery comparable to open surgery and showed evidence through randomized clinical trial. Understanding anatomy and embryology for fine plane dissection and fine instrumentation and traction skills are key components of developments. Laparoscopic gastrectomy is now standard surgery in Korea and expanding indication to advanced disease and total gastrectomy.

C-05

ERGONOMIA ÎN CHIRURGIA SINGLE INCISION

ERGONOMY IN SINGLE INCISION ENDOSCOPY SURGERY

F. M. Sánchez Margallo

Cáceres, Spain

Single-incision endoscopic surgery (SIES) has been consolidated as a real alternative to conventional laparoscopic surgery. SIES reduces incision-related complications, decreases the hospital stay and postoperative pain, and results in better cosmetics results. However, this surgical approach presents some technical challenges for surgeons such as the closer proximity of surgical instrumentation and loss of instruments triangulation, leading to clashing and crossing of the tools both inside and outside the patient. These technical constraints cause a restriction of movements of the surgical instruments, which in turn takes the surgeons to adopt static postures and awkward body postures for long periods of time. We will present the most relevant results in ergonomics from the scientific literature as well as the findings obtained from our own experience. Studies making use of different surgical instruments and surgical ports for SIES, different configurations of the surgical instruments, and using novel surgical instruments such as articulating instruments and handheld robotic devices will be presented. If we analyse ergonomically this surgical approach, SIES leads to a higher workload, muscle activity and wrist's radial-ulnar range of motion when compared to conventional laparoscopic surgery. These circumstances potentially increase the onset of surgeon's muscle fatigue and musculoskeletal injuries. However, the combination of straight instruments with a GelPOINTTM surgical port decreases the surgeon's workload, muscle activity and wrist's radial-ulnar range of motion during SIES. On the other hand, SIES is associated with a more neutral posture of the surgeon's head during surgery in comparison with the conventional laparoscopic approach.

C-06

ADRENALECTOMIA PARȚIALĂ ÎN ERA CHIRURGIEI MINIMAL INVAZIVE

PARTIAL ADRENALECTOMY IN THE ERA OF MINIMALLY INVASIVE SURGERY

Eugenia Yiannakopoulou

University of Applied Sciences, Faculty of Health and Caring Professions Highest Technological Educational Institute of Athens, Atena, Grecia

Traditionally total adrenalectomy has been advocated for the treatment of bilateral adrenal disorders especially in cases of hereditary syndromes like multiple endocrine neoplasia type 2, Von Hippel–Lindau disease and neurofibromatosis type I. However, currently it is well recognized that total adrenalectomy is associated with the morbidity of medical adrenal replacement therapy. Lifelong adrenal replacement therapy after bilateral adrenalectomy may predispose patients to osteoporosis, Addisonian crisis and decreased quality of life. In that context, partial adrenalectomy has been suggested for patients with functioning and non-functioning benign adrenal tumors especially in the case of hereditary adrenal-producing syndromes, bilateral or multifocal lesions or solitary adrenal glands. Advantages of partial adrenalectomy include preservation of adrenocortical function and catecholamine excretion while resultant avoidance of post-operative chronic steroid replacement. Although partial adrenalectomy is technically demanding, recent advances in minimally invasive surgery render conventional laparoscopic partial adrenalectomy and robotic assisted partial adrenalectomy feasible. *Outcomes:* Perioperative outcomes using this technique do not differ from outcomes of complete adrenalectomy. Approximately 90% of patients treated with partial adrenalectomy are free of steroids in the long term. *Technical considerations:* The location of the tumor within the gland is the main determinant of the ability to perform a

partial adrenalectomy. Tumors anterior to and on the margin of the gland are generally more amenable to partial removal than those on the posterior surface of the adrenal gland. Laparoscopic ultrasound allows clear differentiation of the tumor from the normal tissue. It is recommended that tumors should be resected with a 0.5-1 cm margin of normal adrenal tissue.

C-07

ABORDUL MINIM INVAZIV ÎN HERNIILE ABDOMINALE

MINIMALLY INVASIVE APPROACH IN ABDOMINAL HERNIAS

F. Agresta

Adria, Italy

Primary and incisional hernia repairs still show clinical complications in terms of recurrences, pain and discomfort. Factors like surgical approach, prosthesis characteristics and fixation device and method used may influence surgical outcome. Laparoscopic ventral/incisional hernia repair has been widely demonstrated to be safe and effective with lower risk of wound infection and shorter hospital stay compared with open repair. The safety of intraperitoneal meshes are supported by over than 20 years of studies on laparoscopic surgery of hernia repair. Several RCTs and meta-analysis of controlled studies published in the last ten years showed that nowadays laparoscopic repair should be considered a safe technique and there is a sufficient follow-up to state that most of the prosthesis provides safe and long lasting strength to the wall. Fixing of the mesh is another parameter influencing the outcomes of the procedure. Although none of the currently available mesh fixation techniques used in laparoscopy has been found to be superior in preventing hernia recurrence as well as in reducing abdominal wall pain, good results have been reported with non-absorbable spiral tacks. Absorbable devices have been introduced in the market for advertising their property to reduce post-operative pain and intra-abdominal adhesions, and recently few cases series have been reported with satisfactory results. Our Institution, a Community Hospital in the North- East of Italy, has routinely practised laparoscopy over the last 25 years for both basic and advanced procedures, in elective and in emergency situations. We do approach abdominal hernias also in an emergency situation, cause we do believe first of all in the diagnostic value of this approach. We do believe that in a proper setting laparoscopic approach for abdominal hernias is feasible, effective, safe, and beneficial for patients to become a part of common surgical practice, as long as adequate training is obtained and proper preparation observed. We believe also that laparoscopy should be incorporated into a general surgeon's armamentarium for the management of patients with hernia disease as just another tool to be used selectively when indicated and, based on our data and the ones reported in the literature, we advocate a wider adoption of laparoscopy and are confident it will become more acceptable in common surgical practice as it has in ours. However, we do think that every surgeon needs to assess his own experience to decide which is the best approach, taking into account both the clinical situation and his own proficiency with the various techniques.

C-08

MODALITATEA DE ANTRENAMENT ÎN EXCIZIA TOTALĂ DE MEZORECT PE CALE TRANSANALĂ

TRAINING PATHWAY FOR TRANSANAL TOTAL MESORECTAL EXCISION

N. Francis

Yeovil, Marea Britanie

Background: The interest and adoption of transanal total mesorectal excision (TaTME) is growing amongst the colorectal surgical community but there is no clear guidance on the optimum training framework to ensure safe practice for this novel operation. The aim of this study was to establish a consensus on a detailed structured training curriculum for TaTME.

Methods: A consensus process to agree on the framework of the TaTME training curriculum was conducted, seeking views of 207 surgeons across 18 different countries, including 52 international experts in the field of TaTME. The process consisted of surveying potential learners of this technique, an international experts workshop and a final expert consensus to draw an agreement on essential elements of the curriculum.

Results: Appropriate case selection was strongly recommended and TaTME should be offered to patients with mid and low

rectal cancers, but not proximal rectal cancers. Pre-requisites to learn TaTME should include completion of training and accreditation in laparoscopic colorectal surgery, with prior experience in transanal surgery. Ideally, two surgeons should undergo training together in centres with high volume for rectal cancer surgery. Mentorship and multi-disciplinary training were the two most important aspects of the curriculum, which should also include online modules and simulated training for pursestring suturing. Mentors should have performed at least 20 TaTME cases and be experienced in laparoscopic training. Reviewing the specimens' quality, clinical outcome data and entering data into a registry were recommended. Assessment should be an integral part of the curriculum using Global Assessment Scales, as formative assessment to promote learning and competency assessment tool as summative assessment.

Conclusions: A detailed framework for a structured TaTME training curriculum has been proposed. It encompasses various training modalities and assessment, as well as having the potential to provide quality control and future research initiatives for this novel technique.

C-09

ESTE DIFERITĂ EXTENSIA LIMFADENECTOMIEI ÎN REZEȚIILE COLORECTALE LAPAROSCOPICE FAȚĂ DE CELE CLASICE? REZULTATELE FINALE ALE UNUI STUDIU PROSPECTIV

IS THE EXTENT OF LYMPHADENECTOMY DIFFERENT IN LAPAROSCOPIC COLORECTAL RESECTIONS COMPARED WITH THE OPEN APPROACH? FINAL RESULTS OF A PROSPECTIVE STUDY

V. Bintintan¹, Iulia Breaban¹, Andreea Cordoș¹, R. Seicean¹, Cristina Ticra¹, K. Fressman¹, Maria Ceagle¹, G. Dindelegan¹, Adriana Bințișan², R. Chira²

¹Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Chirurgie I, Cluj-Napoca, România

²Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Medicală I, Cluj-Napoca, România

Laparoscopic radical resection of colorectal cancer is a complex procedure, that requires dissection in multiple quadrants of the abdomen and in the narrow pelvis, lymphadenectomy along large vessels such as the superior mesenteric vein and sometimes perivascular dissection along the origin of the inferior mesenteric artery. The question is if it can be performed with the same extent as in open surgery. Starting from 2009, patients with colorectal cancer operated by our surgical team whose data was recorded strictly in a prospective manner have been included in this study that analyzed the surgical technique, extent of lymphadenectomy, total number of lymph nodes retrieved and ratio of metastasized lymph nodes. On our cohort of 144 patients (54 cases in the laparoscopic group vs 90 in the open group) there were no differences between the two surgical approaches in the analyzed parameters. In conclusion, laparoscopy offers the same extent of lymph node resection and total mesocolonic or mesorectal resection and the same degree of lymphadenectomy along inferior mesenteric artery with preservation of the left colic vessels and take down of splenic flexure as open surgery.

C-10

ESOCARDIOMIOTOMIA LAPAROSCOPICĂ

LAPAROSCOPIC ESOCARDIOMIOTOMY

G. Zaninotto

Londra, Marea Britanie

Achalasia, although rare, is the most commonly encountered esophageal motor disorders and it is caused by the failure of relaxation of the Lower Esophageal Sphincter, leading to a difficult passage of the bolus through the cardia orifice. Extramucosa myotomy of the cardia is a time honored treatment of the disease and it usually performed by laparoscopy on the external wall of the distal esophagus and proximal stomach. At the end of the operation an antireflux procedure is usually added (LHM). POEM (per-oral endoscopic myotomy) is a new technique of performing the myotomy from the inside of the esophagus, after dissecting the mucosa, with a flexible endoscopy. Given the absence of visible scar this new procedure is having a large success, especially in young patients. The outcome of the two techniques, however, are much similar, both in morbidity rate and late control of dysphagia. The Achille's heel of POEM is the onset of de-novo, Gastro-Esophageal Reflux, that in most recent series can arrive up to 40% of treated patients, compared to 10-15% of LHM, thus

putting a long shadow on the future diffusion of the technique, especially in patients with along expectancy of life.

C-11

MODALITĂȚI DE PREDARE A CHIRURGIEI LAPAROSCOPICE: LEȚII ÎNVĂȚATE DIN PROGRAMUL DE TRAINING AL MARIII BRITANII

HOW TO TEACH LAPAROSCOPIC SURGERY: LESSONS TO LEARN FROM THE ENGLISH TRAINING PROGRAMME

N. Francis

Yeovil, Marea Britanie

This talk describes how a surgeon can become a teacher. In addition to providing a training framework of teaching technical skills, the presentation covers other factors including psychological, leadership and human factors that underpin a successful trainer in Minimal Access Surgery. It also explores the concept of conscious competence as a surgeon and a trainer and how can this be applied in teaching advanced laparoscopic skills with lessons learned from Laparoscopic Colorectal National Training Programme Training the Trainer (LAPCO TT) curriculum that can be applied to other surgical specialities. Finally, It provide a comprehensive assessment of the impact of training utilising Kirkpatrick's 4 levels of evaluation: (i) pre- and post-course interviews reflecting initial reaction; (ii) training quality assessment on simulated scenarios using the Structured Training Trainer Assessment Report tool; (iii) follow-up interviews at 4 to 6 months; and (iv) delegate performance ratings, by their trainees, using the mini-STTAR and the delegates' trainees learning curves before and after the course. This evaluation confirmed that the LAPCO TT curriculum improved training performance in the short- and long-term, provided a structured training framework, and enhanced the learning curve of delegates' trainees.

C-12

CHIRURGIE NONINVAZIVĂ PRIN FOCUSED ULTRASOUND GHIDAT IMAGISTIC: STATE OF ART ȘI NOI PERSPECTIVE

NON INVASIVE SURGERY THROUGH IMAGE GUIDED FOCUSED ULTRASOUND: STATE OF THE ART AND NEW DEVELOPMENTS

A. Melzer

Dundee, Marea Britanie

Ultrasound and Magnetic Resonance Imaging MRI can be used sequentially to control conventional needle and catheter-based interventions. The "in room" use of ultrasound in the MRI requires certain technical developments [1]. MR guided Focused Ultrasound MRgFUS is an established non-invasive treatment method for stable solid tumours. MRgFUS treatment of liver is an alternative to conventional surgery and RF ablation but has two challenges: the presence of the ribcage and the motion of liver due to respiration. The bone absorbs energy and gets heated which is causing pain and necrosis. Respiratory motion during FUS would lead to ablate healthy tissue, vasculature and can, therefore, cause significant complications. The procedure of MRgFUS of the liver can currently only be performed under apnoea and only to reach caudal lesions in the liver lobes [2]. Our current research includes robotic positioning of FUS (Fig 1) and interactive control of both MRI and FUS to solve these problems. To overcome these challenges, novel controller was designed (TransFusimo) to control MRI (GE 1.5 T Milwaukee, USA) and sonicate with multiple selective-element ultrasonic transducer (InSightec, Israel). Protocols are designed to check treatment parameters for quality assurance. Control parameters that need to be monitored are sonication duration, location, power and temperature for successful application of MRgFUS. Simultaneous use of diagnostic Ultrasound inside an MRI has been accomplished by shielding of conventional Ultrasound with elongated cables (10 meters) with aluminium foils and copper mesh but more suitable is wireless transmission of Ultrasound probe acquired data to the image processing and display unit. In addition, the positioning of the ultrasound and therapeutic probes have to be achieved by a modified MRI compatible robotic system, Innomotion, IBSMM, CZ) [3]. The setup for both solutions has been validated on ex vivo phantom models, ex vivo human cadavers and large animal. Feasibility tests show that Ultrasound probe positioning can be achieved with a precision of +/- 2mm and +/- 2°. The newly developed MRI Focused Ultrasound control protocols can check input and output successfully for control of MRgFUS application to achieve a thermal lesion under simulated respiratory motion (20 mm 16 times/ min). In-room use of

diagnostic and focused Ultrasound inside the MRI is technically feasible and can be used to complement the two imaging modalities both for image-guided diagnostic and therapy of cancer. This can become a significant improvement in the field of surgical oncology to provide non-invasive tumour ablation, mediation of targeted drug delivery [4] and augmented Radiation Therapy [5]. Fig 2 Two Robot arms positioning Diagnostic and Therapeutic Ultrasound (FUTURA FP7 Success Story).

Key words: Ultrasound, Magnetic Resonance Imaging, Focused Ultrasound, MRI guided Focused Ultrasound, Targeted Drug Delivery, FUS Radiation Therapy

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C-13

FLUORESCENȚA ÎN GHIDAREA INTERVENȚIEI CHIRURGICALE: OCHIUL CIBERNETIC CU CARE VEZI INVIZIBILUL

FLUORESCENCE IMAGING GUIDED SURGERY: THE CYBERNETIC EYE TO SEE THE INVISIBLE

M. Diana

IRCAD, Strasbourg, Franța

Fluorescence image-guided surgery (FIGS) is a medical imaging technique that has the purpose of guiding the surgical procedure and provide the surgeon with real-time visualization of the operative field. FIGS enables visualization of unapparent structures at the naked eye, and evaluation of dynamic metabolic activities, such as organ perfusion. Fluorescence is obtained through injection of a fluorescent dye, which can emit a fluorescent signal after being excited by ad hoc laser sources. The fluorescent signal can be either visualized directly on the operative field, in open surgical procedures, or can be captured by specific cameras and displayed on the screen, in the minimally-invasive setting. FIGS is currently more adapted to the needs of surgical navigation, since it does not require bulky equipment in the operating room and the enhanced information provided to the surgeon is displayed in real-time, without disrupting the surgical workflow. There is a growing interest around the potential impact of molecular navigation on surgical outcomes. This is witnessed by the steep increase in the number of publications and by the increasing number of manufacturers, at both corporate and academic level, producing imaging systems enabling FIGS. FIGS has been successfully attempted in a variety of clinical conditions pertinent to the digestive system. The most groundbreaking application, which is still at embryonic state, is the real-time fluorescence-based identification of tumor tissue, thanks to cancer-specific fluorescent probes. In this lecture, the state of the art of FIGS and some future perspectives will be described.

C-14

NOI INSTRUMENTE ȘI TEHNOLOGII ÎN CHIRURGIA MINIM INVAZIVĂ: SUNT CU ADEVĂRAT EFICIENTE?

NEW DEVICES AND TECHNOLOGIES IN MINIMALLY INVASIVE SURGERY: ARE THEY REALLY EFFECTIVE?

F. M. Sánchez Margallo

Cáceres, Spania

Despite the well-known benefits of minimally invasive surgery (MIS) to patients, these surgical techniques entail certain technical challenges for surgeons. These technical limitations were generally increased with the introduction of single incision endoscopic surgery (SIES), in which the freedom of movements of surgical instruments is restricted due to the

single surgical access into the abdominal cavity. In order to overcome some of these technical difficulties, new devices and technologies have been developed for laparoscopic surgery and SIES, providing improved functionalities, precision-driven end-effectors and articulating instrument tips. They aim at enhancing the surgeon's dexterity, increasing the instrument triangulation, and thus improving the performance of certain surgical maneuvers. We will review the most widespread surgical devices and technologies for laparoscopic surgery and SIES available on the market and prototypes, which are focused on addressing some of these technical limitations in MIS. Their additional and innovative functionalities in comparison with conventional laparoscopic instruments and their improvements regarding surgical outcomes and surgeon's ergonomic conditions will be analyzed. These solutions will be organized into two main groups, mechanical devices and robotic-driven systems. In general, they claim to offer an enhancement of surgeon's dexterity, precision and ergonomics. However, not all of these systems provide the right ergonomic conditions during surgery and many of them require a steep learning curve to exploit their full potential.

C-15

EVALUAREA OBIECTIVĂ A CHIRURGIEI LAPAROSCOPICE COLORECTALE: CARE SUNT INSTRUMENTELE?

OBJECTIVE ASSESSMENT OF LAPAROSCOPIC COLORECTAL SURGERY: WHAT ARE THE TOOLS?

N. Francis

Yeovil, Marea Britanie

Introduction: Laparoscopy is widely used in colorectal practice but recent trial results have questioned its use in rectal cancer resections. Patient outcomes are directly linked to the quality of total mesorectal excision (TME) specimen. Objective assessment of intraoperative performance could help ensure competence and delivery of optimal outcomes. Objective tools may also contribute to TME intervention trials but their nature, structure and utilisation is unknown.

Aim: To systemically review the available literature to report on the available tools for the objective assessment of minimally invasive TME operative performance and their use within multicentre laparoscopic TME randomised controlled trials.

Methods: A systematic search of the PubMed and Cochrane databases was performed to identify tools used in the objective intraoperative assessment of minimally invasive TME performance in accordance with the PRISMA guidelines, independently by two authors. The identified tools were then evaluated within reported TME RCTs.

Results: 8642 abstracts were screened of which 12 papers met the inclusion criteria; ten prospective observational studies, one randomised trial and one educational consensus. Eight assessment methods were described which include formative and summative tools. The tools were mostly adaptations of colonic surgery tools based on either operative video review or post-operative trainer rating. All studies reported objective assessment of intraoperative performance was feasible but only 126 (7%) of the 1762 included laparoscopic cases were TME. No multicentre laparoscopic TME trial reported using any objective surgical performance assessment tool.

Conclusion: Objective intraoperative laparoscopic TME performance assessment is feasible, but most of the current tools are adaptation of colonic surgery. There is a need to develop dedicated assessment tools for minimal access rectal surgery. No multi-centre minimally invasive TME RCT reported using any objective assessment tool.

C-16

TRECUT, PREZENT ȘI VIITOR ÎN CHIRURGIA ENDOSCOPICĂ TRANSANALĂ

PAST, PRESENT AND FUTURE OF TRANSANAL ENDOSCOPIC SURGERY

A. Arezzo

Torino, Italia

More than 30 years ago, Gerhard Buess and Transanal Endoscopic Microsurgery (TEM) revolutionized the technique and outcomes of transanal surgery. TEM was originally developed for the treatment of large villous adenomas for which indication it is still considered the standard of treatment and later gained acceptance as local treatment for early rectal cancer [1]. Due to the low morbidity and the almost null mortality compared to trans-abdominal surgery for rectal diseases,

several authors proposed to extend TEM indications to more advanced neoplastic lesions in selected patients unfit for radical surgery, in combination with neoadjuvant techniques. Nevertheless the association with preoperative radiotherapy or chemoradiotherapy produced so far controversial results [2-3] and is far to be accepted as a standard. Although the diffusion of the technique was extremely delayed for the objective difficulty, the increase in confidence brought little by little to extend indications to proximal rectal lesions, and circumferential lesions [4], despite the increased risk of penetrating the peritoneal cavity. Even the opening of the peritoneum, which was considered in former times a good reason to perform only partial-wall excision to avoid intra-operative complications, is now considered routine [5]. A boost to TEM approach was given by the introduction of the concept of Natural Orifices Transluminal Endoscopic Surgery (NOTES) as it was observed 10 years ago, when it was first realized that TEM is in fact a NOTES procedure, which combines also the concept of “solo-surgery” as a single operator is involved. And in fact in the following years a modified TEM instrumentation was proposed for transvaginal applications, till a small series of transvaginal cholecystectomies was performed on humans by Gerhard Buess [6] and included in the EURONOTES Registry as the only transvaginal full-NOTES technique, non hybrid as all the other techniques described, which entail the use of at least one additional trans-abdominal instrument. The TEM approach has also been useful in the minimally invasive treatment of surgical complications such as recto-vaginal fistulas [7] and anastomotic dehiscence with success, opening a new horizon for applications of TEM.

But the real acceleration in the diffusion of the transanal surgical techniques was observed with the introduction of TransAnal Minimally Invasive Surgery (TAMIS), which is feasible with standard laparoscopic instruments. If this technique struggled to prove real benefits compared to the original TEM technique, it became soon a potential platform for Ta-TME technique, with the aim to extend indications of radical surgery in very low and bulky rectal tumors, thanks to a combined approach, so-called “bottom-up”, transanal and transabdominal for rectal resection. On the pages of this journal, Bill Heald, the putative father of Total Mesorectal Excision (TME) affirmed “I predict that 2013 will be the year of endoscopic transanal approaches to radical low rectal dissection and anastomosis” [8] demonstrating great confidence for the technique. This is confirmed by the persisting interest for the technique after several years, and the success of the international Ta-TME clinical registry. At the same time very recently a transperineal minimally invasive approach for extralevator abdomino-perineal excision was reported in literature [9], demonstrating an excellent magnification of the surgical field and a very precise bloodless dissection bottom up even when abdomino-perineal resection is indicated. The use of TAMIS devices as well as the simplified transanal endoscopic microsurgery set offered by Karl Storz as TEO, contributed to a significant cost reduction of the procedure, although renouncing to some of the advantages of the original TEM instrumentation. In the meanwhile, transanal endoscopic microsurgery was proposed and proved feasible under spinal anesthesia in unselected patients, which also contributes and will contribute more in future, to the widening of indications, both with curative and palliative intent. With the publication of the initial experience of the Oxford University group [10] of TEM for high rectal intussusception a new frontier seems to be opening. Over the years a number of interventions have been proposed for rectal prolapse both transanal and abdominal, with the former having fewer complications but requiring a considerable experience, and paying the price of a higher number of relapses. The opportunity to perform interventions such as EndoRectal ProctoPexy (ERPP), better known as “internal Delorme” or a full-thickness internal prolapse resection with the aid of a TEM platform, may represent a useful, minimally invasive tool to address this condition which is as difficult to define and treat. For sure a larger body of data is required to define the benefits of this approach. The history of the TEM platform is therefore surely far to be concluded, with intriguing new perspectives at the horizon.

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C-17

FAȚA SCHIMBATĂ A EVIDENȚEI CLINICE: CUM SĂ FURNIZĂM INFORMAȚIILE ÎN PRACTICA CHIRURGICALĂ

THE CHANGING FACE OF CLINICAL EVIDENCE: HOW TO INFORM SURGICAL PRACTICE

S. A. Antoniou

Exeter, Marea Britanie

Pathways through which surgeons inform their practice have changed over the past decades. Physician's experience and opinion was once the mainstay of clinical decision-making. Basic and animal research dominated in the field of evidence-based medicine in the first part of the 20th century. Today's surgeons are faced with the challenge of staying up-to-date with the literature and being able to evaluate clinical research, which is now the most reliable source of research evidence. Major scientific organisations (WHO, NICE, The Oxford Centre for Evidence-based Medicine, among other) now accept that, although expert opinion and basic research may generate new hypotheses, they do not constitute "hard evidence". This principle is summarised in the pyramid of evidence, of which the top is occupied by systematic reviews, meta-analyses and randomised trials. Taking into consideration that even such research may be flawed and misleading due to methodological, reporting and other sources of bias, informing surgical practice nowadays seems a difficult task. In this labyrinth of information, some key methods to be well informed, to evaluate research evidence and to inform surgical practice are available.

C-18

MINI GASTRIC BYPASS - CUM SUNT INFLUENȚATE REZULTATELE METABOLICE ȘI ALE BRGE ÎN EXPERIENȚA NOASTRĂ

MINI GASTRIC BYPASS - METABOLIC AND GERD INFLUENCE IN OUR SERIES

A. Corradi, O. Scheffel, S. Chiappetta, C. Stier, S. Theodoridou, R. Weiner

International Obesity Center, Sana Klinikum Offenbach am Main, Department of Obesity and Metabolic Surgery, Offenbach, Germania

Introduction: The gaining recognition of obesity surgery is due to its powerful therapeutic effects, not only resulting in successful weights but also in treating and curing the metabolic syndrome. The RNYGB fulfills those expectations, stated in a variety of scientific publications and it is one of the most performed procedures. The MGB with the technical modifications of Dr. Rutledge in 1994 shows in the literature advantages concerning weight loss, treatment of the metabolic syndrome, complication rates and expense factor. It is easier to perform than RYGB and a larger BMI-range can be included.

Methods: Between October 2014 and February 2016 181 RYGB and 94 MGB were performed in our Center. The aim of the study was a comparison of both procedures regarding effectively, efficacy and safety.

Results: Mean preoperative BMI in MGB was 50.1 kg/m², in RYGB 44.9 kg/m². Initial weight in MGB was 146.5 kg, in RYGB 126.9 Kg. Operation time in MGB was 66.6 min (range 28-180), in RYGB 88.5 min (range 41-195). Excess weight loss after 12 months was in MGB 70%, in RYGB 68%. Remission in diabetes mellitus type 2 was 70% in MGB, 56% in RYGB after 12 months. The complication rate was in MGB 6.4%, in RYGB 9.9%. No lethality in both groups. **Conclusion:** MGB seems to be a serious alternative in the treatment of morbid obesity. The lower complexity invites patients with higher BMI. A careful follow-up, a strict supplementation scheme and avoiding ulcerogenic substances are crucial elements of successful therapy. More long-term results are necessary to state the position of MGB in obesity and metabolic surgery.

C-19
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BENEFICIILE ȘI LIMITELE CHIRURGIEI ROBOTICE LA PACIENȚII BARIATRICI

THE BENEFITS AND LIMITS OF ROBOTIC SURGERY IN BARIATRIC PATIENTS

R. Senner

Zurich, Elveția

Any bariatric surgery is a big challenge for each surgeon. Sophisticated anatomy, special difficult anatomical peculiarities and obesity-associated comorbidities distinguish this kind of surgery from other surgical subspecialties. This kind of surgery should consider all peculiarities of obese patients. These include an abdominal wall with a tremendous diameter, a big amount of fat among the omentum causing reduced visibility and very little space at the surgical field due to a big fatty liver and therefore obstructing the access to the stomach. All movements inside the abdominal cavity must be done carefully to avoid imminent complications. There are clear-cut advantages of robotic surgery to conventional laparoscopic procedures.

C-20
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PROCEDEE NOI DE CHIRURGIE METABOLICĂ LA PACIENȚII CU BMI<30

NOVEL METABOLIC SURGICAL PROCEDURES IN PATIENTS WITH BMI<30

E. Taskin¹, J. Melissas², M. Al³, A. Celik⁴, M. Taskin¹

¹Istanbul University, Cerrahpasa Medical Faculty, Department of General Surgery, Istanbul, Turcia

²University of Crete, Department of General and Oncological Surgery, Heraklion, Grecia

³Samsun Buyuk Anadolu Hospital, Department of General Surgery, Samsun, Turcia

⁴Metabolic Surgery Foundation, Metabolic Surgery Centre, Istanbul, Turcia

Background: Bariatric surgery is currently used for weight loss and treatment of co-morbidities such as Type-2 Diabetes Mellitus (T2DM), hypertension, sleep apnea and many others in morbidly obese patients. It is already known that remission of T2DM is independent of weight loss. There are not many concrete data about use of bariatric surgery in low BMI patients. Here we will discuss our multicentre data from IFSO-EC database which is mainly based on experimental procedures in patients with BMI of 28-32 kg/m².

Materials and Methods: 6 patients with BMI between 28-32 kg/m² who underwent side-side Jejunum-Ileal anastomosis were analyzed. After 6 months of follow-up, the mean HbA1c was 6.1% with 74% total remission of T2DM. 72 patients with BMI range of 28-32 kg/m² underwent gastric transit bipartition. After 12 months of follow-up, the T2DM remission rate was 83%. 18 patients who underwent Mini gastric bypass procedure with BMI range of 28-32 kg/m² showed also similar results with 80% of remission of T2DM.

Conclusion: Novel Procedures are effective in providing T2DM remission in Low-BMI patients. They can be used for revisional procedures or in case of T2DM recurrence after Sleeve Gastrectomy. However, there are limited short-term data for the safety and effectiveness of these procedures. These procedures can be justified if long-term data and the results of RCT's are provided in future years. These procedures should be done with a dedicated team in academic setting with IRB approval since they are still experimental procedures and new multi-centre study groups should be supported in the umbrella of Investigational and Experimental Procedures committee of IFSO.

C-21**MGB CA PROCEDURĂ ANTI-DIABET LA PACIENȚII CU INDICE CORPORAL 30:35: UN STUDIU DE 3 ANI PE 450 DE CAZURI****TAILORED MGB AS AN ANTI-DIABETIC PROCEDURE IN BMI 30:35: 3-YEARS STUDY OF 450 CASES**

A. Elsobky

Cairo, Egipt

Background: Type 2 diabetes mellitus has become an epidemic health problem with significant impact on morbidity, mortality and healthcare resources. The medical therapy for T2DM still leaves many patients exposed to the complications of this disease. The American Diabetes Association stated that Bariatric surgery may be considered for adults with BMI > 35 kg/m² and type 2 diabetes, especially if the diabetes or associated comorbidities are difficult to control with lifestyle and pharmacologic therapy. The aim of this study is to evaluate the efficacy and safety of tailored lap Mini Gastric Bypass (MGB) in T2DM patients with BMI 30–35 kg/m².

Methods: The data of 450 patients who underwent tailored Lap MGB from December 2012 to December 2015 at our hospital were reviewed. Mean age was 47 years, mean preoperative BMI was 32.9 kg/m², mean preoperative weight was 91.7 ± 20.3 kg, 58% were women. Preoperative data including glycosylated haemoglobin, fasting plasma glucose, 2 h postprandial glucose, c-peptide (fasting and postprandial) and lipid profile were compared with data collected at 1, 3, and 6, 12, 24, 36 postoperative months.

Results: After 3 years of tailored lap MGB, 78% of patients stopped treatment, 11% of patients shifted to oral hypoglycemic or reduced the dose of oral hypoglycemic and 11% reduced the insulin dose.

Conclusion: The tailored lap MGB leads to resolution or improvement of T2DM in patients with BMI (30-35), with reasonable accepted excess weight loss. The best results are obtained in patients with few years of diabetes, without or with short-term use of insulin treatment, high C-peptide levels and higher preoperative weight.

C-22**PACIENȚI NON-RESPONDENȚI DUPĂ BYPASS GASTRIC PENTRU OBEZITATE MORBIDĂ: HORMONII PEPTIDICI ȘI HOMEOSTAZIA GLUCOZEI****NON-RESPONDERS AFTER GASTRIC BYPASS SURGERY FOR MORBID OBESITY: PEPTIDE HORMONES AND GLUCOSE HOMEOSTASIS**

E. Sima, D. L. Webb, P. M. Hellström, M. Sundbom

Uppsala, Suedia

Background: Roux-en-Y gastric bypass (RYGBP) surgery results in massive weight loss and improved glucose homeostasis, but 20% of patients experience poor long-term weight result. Aims: To compare long-term weight responders to non-responders regarding levels of adipose and gut hormones during fasting and during an oral glucose tolerance test (OGTT). In a subgroup analysis, hormone levels were assessed in diabetic participants. Methods: A matched cross-sectional study measured insulin, glucose, leptin, acyl-ghrelin, total PYY, active GLP-1 and GIP during fasting and OGTT in post-RYGBP subjects: 22 non-responders (BMI 40.6 ± 6.0 kg/m² after an excess BMI loss, EBMIL, of 26.0 ± 15.9%) and 18 responders (BMI 29.5 ± 3.5 kg/m² after an EBMIL of 74.9 ± 18.2%) matched for preoperative age, BMI and years of follow-up. Measures of glucose homeostasis were calculated. Results: Non-responders exhibited higher levels of leptin throughout the OGTT. Fasting leptin correlated negatively with %EBMIL ($r = -0.75$, $p < 0.01$) and fasting ghrelin correlated positively with %EBMIL ($r = 0.31$, $p < 0.05$). During the OGTT, leptin and ghrelin levels deviated from baseline in non-responders. Non-responders had higher insulin resistance than responders, but showed a similar response in GLP-1, GIP and PYY to the OGTT. Diabetic participants showed lower fasting levels of ghrelin and PYY than weight similar normoglycemic participants.

Conclusion: Although fasting leptin and ghrelin levels may be attributed to adiposity in long-term non-responders after RYGBP, hormonal response to a glucose oral load might work towards promoting obesity. Some hormonal differences are associated with glycemic status alone.

ORAL COMMUNICATIONS (OC)

OC-01

HIATOPLASTIA CU RANFORSARE CU PROTEZĂ TEXTILĂ ȘI FUNDOPLICATURĂ TOUPET PENTRU HERNIE HIATALĂ MIXTĂ DE MARI DIMENSIUNI

LAPAROSCOPIC MESH-REINFORCED HIATOPLASTY AND TOUPET FUNDOPLICATION FOR GIANT MIXED-TYPE HIATAL HERNIA

V. Bințișan

Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Chirurgie I, Cluj-Napoca, România

The video presents the surgical technique of transhiatal laparoscopic dissection of a giant mixed-type hiatal hernia followed by hiatoplasty using separate 2.0 Tycron stitches. The hiatoplasty is reinforced with a Parietex™ Composite U-shaped mesh fixed using MultiFire Hernia™ titanium clips. At the end of the procedure a Toupet antireflux procedure is performed.

OC-02

ABORDUL MINIMAL INVAZIV ÎN HERNIILE HIATALE DE MARI DIMENSIUNI

MIS FOR GIANT HIATAL HERNIA

Loredana Barbulescu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Giant hiatal hernia is a clinical entity associated with potential serious complications. The laparoscopic repair of large hiatal hernias is a well standardized therapeutic option, but it is mostly performed in specialized centers, by experienced surgeons. The technical steps of the surgical procedure are presented in a step by step way: exposure of hiatal region, dissection of hiatal sac, mobilization of esophagus, approximation and reinforcement of the crura & hiatus calibration, fundoplication. The laparoscopic repair of large/giant hiatal hernias is a safe approach with a low rate of intraoperative complications, low post-operative morbidity and very low mortality. A high patient satisfaction and a good postoperative quality of life are demonstrated by the laparoscopic procedure. A low rate of recurrence after hiatal mesh reinforcement and low incidence of postoperative gastro-esophageal reflux are also associated with the laparoscopic large hiatal hernia repair.

Conclusion: The laparoscopic approach for repair of large hiatal hernias is a safe method with significant long-term efficacy in terms of symptom control and quality of life.

OC-03

ABORDAREA LAPAROSCOPICĂ A HERNIILOR HIATALE DE MARI DIMENSIUNI - EXPERIENȚA ULTIMILOR 7 ANI

LAPAROSCOPIC APPROACH IN LARGE HIATAL HERNIA - 7 YEARS' EXPERIENCE

M. Bica, D. Preda, Georgiana Graure, Adriana Tudorache, Larisa Duica, D. Cârțu, T. Bratiloveanu, S. Ramboiu, I. Georgescu, V. Șurlin

Universitatea de Medicină și Farmacie, Clinica Chirurgie I, Craiova, România

Introduction: Laparoscopic surgery for hiatal hernias is already a standard procedure in most surgical services. Open surgery is reserved for complicated cases, gastric volvulus and some giant hiatal hernias.

Material and Method: Retrospective study of 92 patients with hiatal hernia admitted over a period of 6 and a half years (2011-2017).

Results: 32 patients underwent laparoscopic surgery. 27 patients had an over 5 cm hiatal ring. Nissen Rossetti procedure was performed for all cases. The annual distribution of cases showed an increasing rate of laparoscopic approaches as the

surgical team gained more experience. Median duration of surgery was 2 hours and 50 minutes. Postoperative outcome was associated with 3 cases of early dysphagia, 2 cases of postoperative bleeding, 4 cases of general complications. Mortality – 2 cases (major PTE)

Conclusion: Laparoscopic approach in hiatal hernias is a safe procedure with favorable postoperative outcome. At this time it represents the gold standard in giant hiatal hernias treatment.

OC-04

TERAPII MINIMAL INVAZIVE ÎN BOALA DE REFLUX ESOFAGIAN: PROCEDURI NECONVENȚIONALE ENDOSCOPICE ȘI LAPAROSCOPICE

MINIMALLY INVASIVE THERAPIES FOR GERD: ENDOLUMINAL AND LAPAROSCOPIC UNCONVENTIONAL PROCEDURES

A. Nicolau

Spitalul Clinic de Urgență, Chirurgie, București, România

GERD is a common disorder as a primary result of the incompetence of low esophageal sphincter (LES). Currently, GERD can be treated by symptomatic medical therapy (MT), or laparoscopic fundoplication (LF). In the last years, other minimally invasive procedures are an alternative option to MT and LF in non severe GERD (hiatal hernia < 2-3 cm. erosive esophagitis Los Angeles C and D, etc.). The main indication are the patients with refractory GERD to MT, who not agree to LF. These procedures augmented the function of an incompetent LES, and are more efficient than MT, easier to perform and with minimally adverse effect than LF. Endoluminal procedures are represented by application of radiofrequency energy via a needle at LES, "Stretta procedure", and the endoscopic fundoplication: TIF (Transoral Incisionless Fundoplication) with "EsophyX®", "MUSE™" (Medigus Ultrasonic Surgical Endostapler) and "GERDX™" (Endoscopic thickness plication). Laparoscopic unconventional procedures insert at the gastroesophageal junction (GEJ) a small flexible band of interlinked titanium beads with magnetic cores, "LINX® Reflux Management" (Magnetic sphincter augmentation), or a peacemaker, "EndoStim® LES Stimulation System" (Endstim BV). Antireflux mucosectomy (AMR) is another recent therapy. These procedures are a bridge between MT and LF. The results are effective, but the long-term results are lacking. Farther development and comparable studies between different techniques are important in the future.

OC-05

PROCEDURA HELLER LAPAROSCOPICĂ - OPȚIUNE FEZABILĂ ÎN TRATAMENTUL ACHALAZIEI

LAPAROSCOPIC HELLER PROCEDURE - FEASIBLE OPTION IN THE TREATMENT OF ACHALASIA

D. Mărgăritescu, Ș. Pătrașcu, L. Barbu, D. Belivaca, V. Șurlin

Universitatea de Medicină și Farmacie, Chirurgie I, Craiova, România

Introduction: Achalasia is a primary motility disorder of the oesophagus consisting in the absence of the oesophagus peristaltics and incomplete or absent relaxation of the inferior oesophageal sphincter as a response to deglutition. Surgical treatment is the final and decisive treatment.

Objective: minimally invasive treatment is being used more and more often for benign and malignant pathologies. We are trying to find the place of laparoscopic surgery in the treatment of achalasia.

Material and Method: 62 years old female patient, with history of cholecystectomy, with achalasia symptoms for the past 2 years having partial response to medical treatment. Endoscopy and manometry reveal type II achalasia. Laparoscopic surgery is performed - Heller oesocardiotomy with a Dor anterior valve. Duration: 3 hours. No incidents. Postoperative favorable outcome. Contrast Xray revealed a dilated oesophagus with tertiary waves.

Conclusion: Laparoscopic myotomy can be performed with minimal complications in selected cases by an experienced surgical team.

OC-06

REZECTIE TRANSHIATALĂ A UNUI DIVERTICOL EPIFRENIC ESOFAGIAN DE MARI DIMENSIUNI

LAPAROSCOPIC TRANSHIATAL RESECTION OF LARGE EPIPHRENIC ESOPHAGEAL DIVERTICULUM

P. Puia, Paula Bucerzan, I. C. Puia, C. Puia

Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Clinica de Chirurgie, Cluj-Napoca, România

Background: Epiphrenic diverticulum is a rare disorder of the distal third of the esophagus. We report the case of a 78-year-old man with a large symptomatic esophageal epiphrenic diverticulum, diffuse nonspecific esophageal dysmotility, and a hiatal hernia.

Methods: Surgery was indicated by the patient's dysphagia, regurgitation and the size of the diverticulum (7cm) causing lateral compression. Preoperative study included barium swallow and upper gastrointestinal endoscopy. A laparoscopic transhiatal diverticulectomy associated with a hiatoplasty was carried out. A Heller procedure was considered unnecessary. The overall operative time was 150 minutes.

Results: No intraoperative complications occurred. Gastrografin swallow performed on postoperative day 4 did not show any signs of leakage from the staple line. The postoperative hospital stay was 7 days. Ba-swallow on day 7 showed a small segment of the diverticula (2/8 mm lumen) still remained. Functional and subjective results were optimal. No dysphagia or regurgitation persisted.

Conclusion: The laparoscopic approach to epiphrenic diverticulum is feasible with good functional results even in elderly people.

Key words: epiphrenic esophageal diverticulum, diverticulum, laparoscopic transhiatal approach.

OC-07

REDO ESOCARDIOMIOTOMIE PENTRU ACHALAZIE RECIDIVATA

REDO ESOCARDIOMIOTOMY IN ESOPHAGEAL ACHALASIA

Simona Filip, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Introduction: Esophagocardiomyotomy is the most effective treatment for Achalasia. However, a significant recurrence rate is encountered after open or laparoscopic surgery.

Aim: To determine if laparoscopic redo Heller is a valuable treatment option for early recurrent Achalasia.

Material and method: We present a case of recurrent achalasia cardia after previous incomplete open myotomy successfully managed by laparoscopic redo esophagocardiomyotomy and anterior Watson fundoplication.

Discussions: Recurrences of symptoms after surgery for Achalasia are not uncommon, causes include incomplete myotomy, scarring, megaesophagus, constricting fundoplication, gastroesophageal reflux. Early recurrences due to incomplete myotomy distally on the stomach or proximally on the esophagus require redo-myotomy while late recurrences require esophagectomy because of irreversible progression of the disease and developing of megaesophagus. In cases of early recurrence after incomplete esocardiomyotomy laparoscopic redo esocardiomyotomy and fundoplication is recommended. Preoperative work-up, surgical steps, technical difficulties (protecting vagus nerves and mucosa integrity), particularities of esocardiomyotomy in terms of length extent, completeness and location, the type of associated fundoplication are discussed introducing references from literature.

Conclusions: Laparoscopic redo Heller procedure is a technically difficult intervention requiring advanced knowledge of the gastroesophageal region and advanced laparoscopic experience. In our experience as in literature, the laparoscopic redo Heller procedure after previous incomplete esocardiomyotomy for cardia achalasia was a safe and effective surgery with good long-term results.

OC-08

MĂSURAREA SUPRAFEȚEI HIATUSULUI ESOFAGIAN - INSTRUMENT UTIL ÎN DECIZIA PREOPERATORIE DE TRATAMENT AL HERNILOR HIATALE LA PACIENȚII BARIATRICI**HIATAL SURFACE AREA MEASUREMENT AS USEFUL TOOL FOR PREOPERATIVE DECISION MAKING IN THE TREATMENT OF HIATAL HERNIA OF BARIATRIC PATIENTS**

C. E. Boru, G. Silecchia

University La Sapienza of Rome, Department of General Surgery & Bariatric Center of Excellence-IFSO EC, AUSL LT-ICOT, Latina, Italia

Introduction: Hiatal surface area (HSA) calculation has been recently proposed as a useful marker for choosing the right treatment of enlarged esophageal hiatus complicated with hiatal hernia: simple, reinforced or tension-free cruroplasty, based on arbitrary values (lower or more than 5 cm²). In the same time, preoperative upper GI endoscopy or barium swallow cannot predict exactly the real intraoperative findings. MDCT scan of the hiatal area was shown to be useful in hiatal hernia management.

Methods: We retrospectively analyzed 25 patients, candidates for laparoscopic antireflux surgery LARS as primary surgery, single or concomitant with or after bariatric surgery. Patients were analyzed before surgery and after one-year follow-up and 6 control patients were analyzed prospectively. Multiplanar multislice MDCT scan measurement of esophageal hiatus surface was done preoperatively, while intraoperative calculation of the HSA completed evaluation. Control postoperative CT-scan was done after 12 months, or when necessary.

Results: Mean HSA in obese patients candidates to LARS, with known defect of hiatal area was 10.75 ± 4.54 cm², while mean HSA after LARS (cruroplasty \pm redo bariatric surgery) was 5.89 ± 3.0 cm². Intraoperative measurement of HSA was 11.25 ± 6.2 cm². Mean HSA in control patients (no obesity, no HH, no MRGE) was less 5 cm² (2.94 ± 0.66), and similar in obese, non-complicated patients with previous bariatric surgery and cruroplasty.

Conclusions: These are preliminary results, but multiplanar MDCT measurement of esophageal hiatus surface could be a better radiological instrument in preoperative evaluation and decision making for proper surgical treatment.

OC-09

ABORDARE LAPAROSCOPICĂ A UNUI HEMATOM HEPATIC DE MARI DIMENSIUNI**LAPAROSCOPIC APPROACH FOR A GIANT HEPATIC HEMATOMA**S. Olariu¹, M. S. Murariu¹, N. Pop¹, A. Părău², Sonia Olariu¹¹*Universitatea de Medicină și Farmacie „Victor Babeș”, Clinica I Chirurgie, Timișoara, România*²*Spitalul Clinic Județean de Urgență „Pius Brînzeu”, Clinica I Chirurgie, Timișoara, România*

Aim: Demonstration of the superiority of minimally invasive approach in patients with myocardial infarction who require operative treatment.

Material and Method: We present the case of a patient of 43 years old, male who suffered a heart attack 30 days after a minor abdominal trauma from falls. For the myocardial infarction was performed thrombolytic therapy followed by the development of a giant liver hematoma. After careful clinical surveillance to improve cardiac function, by laparoscopic approach was evacuated hematoma in both liver lobes.

Results, Discussion: Surgical and cardiological evolution was favorable, the patient being discharged with cardiological surveillance. Liver hematoma after thrombolytic therapy is a rare complication. Laparoscopic approach has been the ideal solution in this case, the operative trauma was reduced to a minimum.

Conclusion: By the minimally invasive character, the laparoscopic approach confirms its superiority even in critical cases.

OC-10

DEZVOLTAREA ȘI VALIDAREA UNUI MODEL DE TRAINING PENTRU REZEȚIILE HEPATICE LAPAROSCOPICE

DEVELOPMENT AND VALIDATION OF A TRAINING MODEL FOR LAPAROSCOPIC LIVER RESECTIONS

C. Popa¹, C. Pestean², C. Ober², F. Graur³, R. Couti⁴, T. Al-Momani⁵, R. C. Elisei⁵, N. Al Hajjar³, L. Oana²

¹*Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Chirurgie Generală, Cluj-Napoca, România*

²*Universitatea de Științe Agricole și Medicină Veterinară, Facultatea de Medicină Veterinară, Departamentul de Anesteziologie și Propedeutică Chirurgicală, Cluj-Napoca, România*

³*Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Chirurgie, Cluj-Napoca, România*

⁴*Centrul de Training și Cercetare „Prof. Dr. Sergiu Duca”, Departamentul de Urologie, Cluj-Napoca, România*

⁵*Centrul de Training și Cercetare „Prof. Dr. Sergiu Duca”, Departamentul de Chirurgie Generală, Cluj-Napoca, România*

Onjective: Development and validation of a complex experimental laparoscopic liver resection model on swine for resident doctors.

Material and Methods: In the first stage 15 residents were divided into 5 teams according to the level of experience in laparoscopic surgery: no experience- one team, basic level-two teams, intermediate-two teams. An original protocol was applied, involving a 'step-by-step' approach from theoretical training, simulation using ex vivo biological material to intervention on live pigs. Each team performed the operations using three anesthetized pigs. The second stage consisted of the comparison of two teams of residents with training in laparoscopic liver surgery from the first stage and two of the senior doctors with experience in laparoscopic surgery but with no specific training for hepatic surgery. Each team performed the interventions following the same standardized protocol.

Results: In the first stage, all participants were able to perform the protocol steps including small liver resections. Large liver resections have been successfully completed by those with laparoscopic experience without significant differences between basic and intermediate levels. In the second stage, the time for liver resections, blood loss and conversion rates were significantly lower in those with specific training for laparoscopic liver surgery than those experienced in laparoscopic surgery but without specific training.

Conclusions: The proposed experimental model can be applied in the training of resident doctors, who gain experience and efficiency in laparoscopic liver surgery in swine only if they are involved in a standardized and continuous training program.

OC-11

DUODENOPANCREATECTOMIE CEFALICĂ LAPAROSCOPICĂ PENTRU TUMORĂ AMPULARĂ BENIGNĂ

LAPAROSCOPIC CEPHALIC DUODENOPANCREATECTOMY FOR BENIGN AMPULLARY TUMOR

F. Zaharie¹, C. Zdrehuș², C. Popa³, Roxana Zaharie⁴, Andrada Văduva³, I. Balint³, C. Iancu¹

¹*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Chirurgie 3, Cluj-Napoca, România*

²*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, ATI, Cluj-Napoca, România*

³*Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Chirurgie 3, Cluj-Napoca, România*

⁴*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Medicală 3, Cluj-Napoca, România*

Introduction: Laparoscopic duodenopancreatectomy performed for cephalic pancreatic tumors or ampullary tumors represent a technical challenge. It requires specialized instruments and technical skills of advanced laparoscopic surgery.

Aims: We present the case of a patient aged 51 years who was clinically and imaging (CT and EUS) diagnosed in our service with high dysplasia ampullary adenoma.

Methods: In this case, it was performed a laparoscopic cephalic duodenopancreatectomy with dual-layer, continuous thread

3-0 pancreatic-jejunostomy, hepatic-jejunostomy TL with separate threads and mechanical gastrojejunostomy TL using EndoGIA 60 mm 3.5 mm stapler. The entire surgical intervention lasted 10 hours, 150 ml blood loss.

Results: Postoperative recovery period was marked by the appearance of a hepatic-jejunostomy fistula that required classical reintervention and restoration assembly. The patient was discharged surgically cured day 11 of hospitalization.

Conclusion: Laparoscopic approach in treating cephalic pancreatic tumors in selected cases is feasible. Given the complexity and duration of surgery, experts recommend performing this type of surgery in two teams (first one for resection and the other for reconstruction).

OC-12

PANCREATECTOMIE CENTRALĂ CU ANASTOMOZĂ PANCREATO-GASTRICĂ PRIN ABORD TOTAL LAPAROSCOPIC

CENTRAL PANCREATECTOMY WITH PANCREATO-GASTRIC ANASTOMOSIS BY TOTALLY LAPAROSCOPIC APPROACH

A. Bartoș¹, Dana Bartoș¹, Raluca Stoian¹, Ioana Iancu¹, C. Cioltean¹, C. Breazu²

¹*Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Chirurgie Generală, Cluj-Napoca, România*

²*Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, ATI, Cluj-Napoca, România*

Introduction: Pancreatectomy performed exclusively laparoscopically is the most advanced technique in the therapeutic arsenal of pancreatic surgery. For tumors of the pancreatic tail, laparoscopic approach has gradually become a standard indication in specialized centers. In contrast, central pancreatectomy and duodenopancreatectomy, although feasible through a minimal invasive approach, are not routinely performed, most likely due to the technical complexity and risk of complications.

Case Presentation: We present a case of a 40 year old female patient, diagnosed with corporeal pancreatic neoplasm on which we performed a laparoscopic central pancreatectomy with pancreatico-gastric anastomosis. The postoperative outcome has been marked by an episode of acute necrotic cephalic pancreatitis, the previous laparoscopic approach facilitating a minimally invasive approach for necrectomies and drainage. The patient was discharged 14 days postoperatively, with remission of the pancreatitis.

Conclusions: We believe that the total laparoscopic approach is feasible for the radical surgery of corporeal pancreatic tumors, dissection and reconstruction time being facilitated by the magnification and good quality of laparoscopic imaging. Moreover, the occurrence of complications such acute pancreatitis can be managed with minimal invasiveness, with a positive impact on disease progression.

OC-13

ABORDARE MINIMAL INVAZIVĂ ÎN DIAGNOSTICUL ȘI TRATAMENTUL UNUI CAZ RAR DE DISTROFIE CHISTICĂ DUODENALĂ ASOCIATĂ CU PANCREATITĂ CRONICĂ COMPLICATĂ CU PANCREATITĂ ACUTĂ RECURENTĂ

MINIMALLY INVASIVE APPROACH IN THE DIAGNOSIS AND TREATMENT OF A RARE CASE OF DUODENAL CYSTIC DYSTROPHY ASSOCIATED WITH CHRONIC PANCREATITIS COMPLICATED WITH RELAPSING ACUTE ANCREATITIS

Alina Constantin, Irina Balescu, A. Saftoiu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Cystic dystrophy of the duodenal wall is a serious but uncommon complication of heterotopic pancreatic tissue characterized by increased duodenal wall thickness associated with intraparietal cystic lesions. The best diagnostic strategy consists in Endoscopic Ultrasound (EUS) and Magnetic Resonance Cholangio-Pancreatography (MRCP). The endoscopic treatment may be an option for patients who have not achieved complete alcohol abstinence. Surgical treatment provides long-term relief of symptoms. The presented case is a 35-year-old man, occasional drinker, with history of chronic hepatitis B and recurrent acute pancreatitis who presented with acute onset of abdominal pain, distention and subsequent nausea and vomiting. Laboratory studies showed leukocytosis with neutrophilia and elevated amylase and lipase. Multidetector CT (MDCT) scan was performed and revealed a bulky head of pancreas with a hypodense area between pancreatic head and second part of duodenum,

peripancreatic fat thickening and fluid. MRCP confirmed a thickening of the duodenal wall and a dilated Wirsung. In view of the diagnostic doubts, a EUS was requested, evidencing the presence of multiple cystic areas in the duodenal wall, all of them less than 1 cm, suggestive of CDDW. Laparoscopic side-to-side pancreatojejunostomy was performed with successful outcome and disappearance of symptoms. Technical challenges and outcomes are extensively commented.

Key words: cystic dystrophy, acute pancreatitis, endoscopic ultrasound EUS, heterotopic pancreas

OC-14

CÂND DEVINE REZEȚIA LAPAROSCOPICĂ PENTRU SEGMENTELE 2-3 HEPATICE STANDARDUL DE AUR - ÎNCEPUTUL UNEI EXPERIENȚE

WHEN DOES LAPAROSCOPIC LIVER SEGMENT 2-3 RESECTION BECOME THE RULE - BEGINNING OF AN EXPERIENCE

O. Ginghină¹, R. Iosifescu¹, M. Zamfir¹, A. Stoica¹, Andrada Spânu¹, Mara Mardare¹, Clarisa Bîrlog¹, Camelia Călin², O. Ginghină³, N. Iordache¹

¹Spitalul Clinic de Urgență „Sf. Ioan”, Chirurgie Generală, București, România

²Spitalul Clinic de Urgență „Sf. Ioan”, Anestezie, București, România

³Spitalul Clinic de Urgență „Sf. Ioan”, Clinica Chirurgie I, București, România

Introduction: In October 2013, the first anatomical left hepatectomy was performed and afterwards the first segment 2-3 resections.

Material and Methods: While increasing the level of surgical expertise in classic liver surgery, we performed all the cases in 2017 that required a left lateral section via laparoscopy.

Results: The progress on the learning curve was proved by the decrease of operating time, admission period and perioperative morbidity.

Conclusion: While at the beginning of the experience we performed only biopsies and small wedge resections, laparoscopy became more and more the way to treat more complex cases requiring hepatectomies.

OC-15

REZEȚIA HEPATICĂ LAPAROSCOPICĂ PENTRU CARCINOMUL HEPATOCELULAR PRIN UTILIZAREA DISPOZITIVELOR BIPOLARE DE RADIOFRECVENȚĂ - EXPERIENȚA INIȚIALĂ

LAPAROSCOPIC LIVER RESECTION FOR HEPATOCELLULAR CARCINOMA USING BIPOLAR RADIOFREQUENCY DEVICE - EARLY EXPERIENCE

L. Mosoia Plaviciosu, V. Ștefănescu, F. Macau, C. Mitru, V. Dumitrașcu

Spitalul Universitar de Urgență Militar Central „Dr. Carol Davila”, Chirurgie I, București, România

Objective: Laparoscopic liver resection remains a surgical procedure of great challenge because of the risk of massive bleeding during liver transection and the complicated biliary and vascular anatomy in the liver. Various techniques and energy-based devices have been used to minimise the blood loss during transection of the liver parenchyma laparoscopically.

Materials and Methods: The laparoscopic Habib™ 4X is a bipolar radiofrequency device consisting of a 2x2 array of needles arranged in a rectangle. It produces coagulative necrosis of the liver parenchyma sealing biliary radicals and blood vessels and enables bloodless transection of the liver parenchyma. Two patients underwent laparoscopic liver resection in a period of 12 months. Indications for liver resection were marginal hepatocellular carcinoma (3.7/3.1cm and 8/7 cm) in two cirrhotic patients. Technical aspects were analysed.

Results: One patient underwent S6 resection, the other one underwent S2-S3 resection. Pringle manoeuvre was not used in any of the patients. Mean operative time was 180 minutes (range, 160-200 minutes). Bleeding control along the transection line was satisfactory. No conversion to laparotomy was required. Operative blood loss was minimal. No blood transfusion was recorded. The postoperative period was uneventful. Median postoperative hospital stay was 3 days. Histopathology revealed that the margins were disease free.

Conclusion: Laparoscopic liver resection can be safely performed with laparoscopic Habib™ 4X with a significantly low risk of intraoperative bleeding or postoperative complications.

OC-16

HIPEC LAPAROSCOPIC ÎN CANCERUL GASTRIC AVANSAT

LAPAROSCOPIC HIPEC FOR ADVANCED GASTRIC CANCER

Irina Balescu, V. Tomulescu, Daniela Godoroja, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Once the benefits of intraperitoneal heated chemotherapy (HIPEC) have been widely demonstrated in patients diagnosed with peritoneal carcinomatosis from colorectal or ovarian cancer, the method has been recently introduced in the therapeutic armamentarium of gastric cancer. Moreover, due to the fact that gastric cancer has a particular aggressive biology, HIPEC is also recommended for locally advanced tumors in the absence of macroscopic peritoneal metastases. In the current paper we present a case series of two patients diagnosed with advanced stage gastric cancer submitted to laparoscopic gastrectomy with D2 lymph node dissection and Roux en Y eso-jejunal anastomosis, total omentectomy, appendectomy and cholecystectomy. In both cases laparoscopic HIPEC was performed at 41C, using oxaliplatin for 30 minutes. The post-operative evolution was uneventful in both cases. The histopathological studies confirmed the presence of advanced stage tumors with serosal invasion in both cases; a total number of 18 and 21 lymph nodes were studied, tumor involvement being revealed in 3 and 2 lymph nodes, respectively. In conclusion, laparoscopic HIPEC for advanced stage gastric is a feasible procedure for gastric cancer and it can be safely addressed to improve the outcomes. Further studies are needed to demonstrate the long-term benefits .

OC-17

GASTROENTEROANASTOMOZĂ TRANSMEZOCOLICĂ ROUX-EN-Y LAPAROSCOPICĂ PENTRU CANCER GASTRIC LOCAL AVANSAT CT4N2M1

LAPAROSCOPIC ROUX-EN-Y TRANSMEZOCOLIC GASTROENTEROANASTOMOSIS FOR LOCALLY ADVANCED CT4N2M1 DISTAL GASTRIC CANCER

V. Bințișan

Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Chirurgie I, Cluj-Napoca, România

The video presents the surgical technique of laparoscopic transmesocolic Roux-en-Y gastroenterostomy performed as palliation for gastric outlet stenosis in a cachectic patient with stenosing cT3N2M1 distal gastric cancer and a Karnofsky performance index of 50%. The postoperative outcome was uneventful and the patient was discharged on the 7th post-operative day on oral feeding; at present she is under palliative chemotherapy treatment

OC-18

ABORDAREA LAPAROSCOPICĂ A GIST-URILOR GASTRICE

LAPAROSCOPIC APPROACH OF GASTRIC GISTS

S. Bordu, T. Bratiloveanu, S. Ramboiu, A. Gogănu, Georgiana Graure, A. Nicolaescu, S. Săndulescu, E. Georgescu, I. Georgescu, V. Șurlin

Spitalul Clinic Județean de Urgență, Universitatea de Medicină și Farmacie, Chirurgie Generală I, Craiova, România

Introduction: Gastrointestinal stromal tumors (GIST) are the most common mesenchymal tumor of the digestive tract (80%) and represent 2% of the gastrointestinal tract tumors. The most common location is gastric (60%). The laparoscopic

approach has been extended to this pathology.

Material and Method: We present 2 cases of distinct GIST from the point of view of symptomatology and diagnosis. The first case is a 75-year-old woman admitted to emergency with severe anemia, haematemesis and melen. EDS: a submucosal gastric tumor of 4/5 cm, with mucosal ulceration and adherent blood clot on the posterior gastric wall. The second case: a 48-year-old man with early postprandial pain and heartburn. EDS reveals a 5 cm gastric tumor at the fornix level, the biopsies taken by diagnosing GIST. Metastases were excluded by CT examination in both patients. Surgery was performed after normalization of hemoglobin with blood transfusions in the emergency patient and programmed in the chronic patient by laparoscopic approach. In the first case, the tumor was excised by anterior longitudinal gastrotomy and tumor resection in the posterior wall using an endoscopic stapler, the gastrotomy being closed with an endoscopic stapler. In the second case, the tumor was removed by partial gastrectomy at the level of the fornix with the EndoGIA stapler.

Results: The histopathological examination and immunohistochemical analysis revealed gastrointestinal stromal tumors with low malignancy in both patients. At the present the emergency patient is healed after Gleevec® therapy and the planned surgery patient does not require adjuvant therapy because it falls into the very low relapse risk class.

Conclusions: The GIST diagnosis is difficult because they are asymptomatic for a long time or with non-specific symptoms. Surgery is the main curative treatment.

OC-19

REZEȚIA PE CALE LAPAROSCOPICĂ A UNUI GIST DUODENAL

LAPAROSCOPIC DUODENAL GIST RESECTION

A. Velici, B. Smeu, V. Tomulescu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Background: Duodenal localization of the Gastro Intestinal Stromal Tumors (GISTs) is infrequent but they are associated with challenging diagnostic and treatment. Aim To present the details of the medical strategies we have applied in a case of duodenal GISTs.

Method: A case presentation of a 43 years old male patient, with 2 years history of Upper GI bleeding; during these episodes his hemoglobin was as low as 5.6g/dL and blood transfusions were required. Upper Endoscopy was performed and a Duodenal Ulcer Forrester IIC was revealed. In 2017, a MRI scan that showed a duodenal GIST. He was admitted to our clinic for upper GI bleeding and melena. A complete investigational work-up was performed and case was discussed in the Institutional Tumor Board. Endoscopic ultrasound (EUS) revealed at DII level, a tumor with the characteristics of a duodenal GIST that comes in close contact with the gastro-duodenal artery and the pancreas with no signs of invasion. FNA was contraindicated. An ulcer located in the superior duodenal angle, with the Ø 0.5cm covered in fibrin, with no signs of recent bleeding was also described. The CT Scan (Thorax, Abdomen, and Pelvis) described a DII tumor, close to the upper angle of duodenum, dimensions of 35/28/44mm, with the characteristics of a duodenal GIST that comes in close contact with the gastroduodenal artery and vascular branches of the pancreatic-duodenal arcade and partial erases the cleavage outlines next to the pancreatic head. The Institutional Tumor Board's decision was to go for surgery: the GIST oncological excision, either pancreaticoduodenectomy or a limited GI resection.

Results: We have performed a LAPAROSCOPIC BLOCK EXCISION OF THE TUMOR WITH DI AND DII, GASTRIC ANTRUM AND LIMITED PARTIAL PANCREATIC HEAD with a Roux-en-Y gastro-jejunal anastomosis with a TACTICAL CHOLECYSTECTOMY with INTRAOPERATIVE CHOLANGIOGRAPHY to make sure that the papilla is unaffected. Initial evolution was favorable with the developing, after few days, of a small pancreatic fistula that was treated conservative way with percutaneous drainage; the fistula closed after approximately 30 days. The histopathological examination reported the tumor as GIST G2 pT2N0MxR0 with a high risk of progressive disease and negative resection margins. Imatinib for 3 years was decided as oncological adjuvant therapy and the patient was included into an active follow-up program.

Conclusion: Diagnostic of a duodenal GIST might be challenging. Laparoscopic R0 excision was an efficient therapeutic solution.

OC-20

ENDOMETRIOZA PROFUNDĂ CU AFECTARE COLORECTALĂ**DEEP ENDOMETRIOSIS WITH COLORECTAL INVOLVEMENT**

C. Copăescu, B. Smeu, I. Hutopilă

Ponderas Academic Hospital, Bucharest, Romania

Endometriosis is a disease that affects approximately 6–10% of women worldwide, characterized by growth of the endometrium outside the uterus. The incidence of intestinal endometriosis is reported between 5.3 and 12% of cases and of these, between 70 and 93% are located in the rectum and sigmoid. (1) Significant functional disorders are associated with the surgery in these cases (2)

Aim: to present the medical strategies and outcomes in our series of deep endometriosis with colorectal involvement.

Methods: This is a retrospective analyze of a prospective kept data base including all the cases who underwent surgery for this particular situation between 2011 and 2017 in PONDERAS ACADEMIC HOSPITAL. Investigations included physical examination, transvaginal ultrasonography, pelvic MRI and CT, Virtual Colonoscopy, endorectal ultrasound and Endoscopic Ultrasound (EUS) to evaluate the full extent of pelvic involvement and other GI sites of implantation, the rectal muscle invasion, depth of colorectal wall infiltration and FNA Biopsy. Entero MRI, Cystoscopy, Laparoscopy were performed in some cases. A multidisciplinary team consisting in GI colorectal surgeon, gynecologist and urologist was involved in all the cases. Laparoscopic shaving, full-thickness excision or segmental resection was performed, depending on the depth and surface of the bowel wall invasion.

Results: 41 patients were included into the study. Shaving was performed in 18 patients, wedge resections in 11 and segmental in 12. Seven complex cases were recorded (multiorgan). The median operative time was 217 min (130'-300'). Median intraoperative blood loss – 210 ml (100-450). Median hospital stays – 5,5 days (4-7 days). Bowel movements - 3.5 days (1- 5 days). Complications – 1 rectovaginal fistula - 10th postoperative day. Pain relief was noted in 91% and no recurrence to date. Considering the tardive functional disorders – constipation, or incontinence (33% - 4 of the 12 segmental resections), we have decided for a conceptual surgical strategy change considering more the conservative options and limited segmental resections.

Conclusions: Severe endometriosis with colorectal involvement requires extensive evaluation of a multidisciplinary team. Laparoscopic approach is efficient, recommended whenever possible. Conservative and aggressive surgical options should be balanced for better functional outcomes.

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OC-21

SIGURANȚA ȘI EFICACITATEA SUPRARENALECTOMIEI LAPAROSCOPICE ÎN FEOCROMOCITOAMELE ADRENALE DE MARI DIMENSIUNI**EFFECTIVENESS AND SAFETY OF LAPAROSCOPIC ADRENALECTOMY FOR LARGE PHEOCHROMOCYTOMA**V. Tomulescu¹, Bianca Neagoe², Loredana Barbulescu¹, Gabriela Droc², Daniela Godoroja¹, C. Badiu³¹*Ponderas Academic Hospital, Bucharest, Romania*²*Fundeni Clinical Institute, Bucharest, Romania*³*IC Parhon Institute, Bucharest, Romania*

This study aimed to evaluate the effectiveness and safety of minimally invasive adrenalectomy for large pheochromocytoma and the median-term outcomes after surgery.

Methods: A retrospective review was performed on patients who had a pheochromocytoma and underwent surgery in "Dan Setlacec" Department of Surgery and Liver Transplantation Fundeni Clinical Institute between Jan 2005 and Sept 2016. The diagnosis of pheochromocytoma was confirmed by clinical features, evidence of elevated plasma methoxy amines and urine metanephrines, radiologic imaging evidence of malignancy (e.g., local invasion, metastases) being a contraindication to a

laparoscopic approach. All patients were prescribed an oral alfa-receptor blocker, and a beta-receptor blocker if indicated under the evaluation of an endocrinologist.

Results: From Jan 2005 to Sept 2016, 44 laparoscopic or robotic adrenalectomies with pathologic exam of pheochromocytomas were performed. Out of them large pheochromocytomas (>6 cm) were observed in 30 patients (68%), 21 women and 9 men with a mean age of 48 years (15–70 years). All cases were situated unilateral with equal distribution right/left 6 cases were performed robotically. Histologically, pheochromocytoma was confirmed in all cases. Cystic parenchymal degeneration (e.g., cyst, hemorrhage, or necrosis) was found in 2 patients. The specimens had a median weight of 100 g (range 40–202 g). There have been no mortality and morbidity consisted in one case (3,33%) of Clostridium Difficile infection solved with Metronidazole treatment. The average length of hospital stay was 7.5 days (range 4–10 days). All patients were transferred to Parhon Institute for reevaluation. Biochemical cure was achieved in all patients, as reflected by normal urinary metanephrines and constant follow up have shown no patient recurrence.

Conclusions: The excellent magnified view, fine dissection, and minimal manipulation provided by the laparoscopic approach offers a chance of safe and complete resection of large adrenal tumors. Pheochromocytoma remain the most challenging adrenal tumor to approach minimally invasive, independent of its size., better results are obtained by trained surgeons part of an experienced team together with endocrinologists, and anesthesiologists.

OC-22

MANAGEMENTUL LAPAROSCOPIC AL INSULINOMULUI

LAPAROSCOPIC MANAGEMENT OF INSULINOMA

R. C. Popescu, Cristina Dan, A. C. Ghioldiș, R. D. Boșneagu, A. Dosa

Spitalul Clinic Județean de Urgență „Sf. Apostol Andrei”, Clinica Chirurgie I, Constanța, România

Objective: Insulinoma is a rare, solitary, most common benign neuroendocrine pancreatic tumor. The laparoscopic management of these tumors involves anacute imaging evaluation and consists of enucleation or distal resections.

Material and Methods: We present the case of a pancreatic insulinoma located at the level of the pancreas tail, for which distal pancreatectomy was practiced by stapling. The diagnosis was based on the presence of the Whipple triad and imaging investigations for tumor localization.

Results: The postoperative evolution was simple, without complications, with the remittance of hypoglycemic episodes.

Conclusions: The laparoscopic approach of insulinoma is safe and feasible when practiced by experienced teams in advanced laparoscopic surgery, with superior results to open resections in terms of recovery and hospitalization.

OC-23

ABORDUL MINIMAL INVAZIV ÎN ADENOAMELE PARATIROIDIENE ECTOPICE MEDIASTINALE

MINIMALLY INVASIVE APPROACH FOR MEDIASTINAL ECTOPIC PARATHYROID ADENOMA

V. Tomulescu

Ponderas Academic Hospital, Bucharest, Romania

Parathyroid adenomas are the most common cause of primary hyperparathyroidism. Most parathyroid adenomas are located in the orthotopic position in close relation with the thyroid. However, approximately 10-20% of parathyroid adenomas are located ectopically (1). Ectopic parathyroid adenomas are the most frequent cause of a failed cervical exploration (2). Thoracoscopic approach has several advantages: • lesser invasiveness and pain, • shorter operative time, • better visualization of tumor, • reduction in the duration of hospital stay, • a superior cosmetic. PTH monitoring during operation is valuable as serum PTH concentration declines immediately after tumor resection help reduce the failure rate of surgery and prevent unnecessary re-exploration (3). Secondary hyperparathyroidism refers to the excessive secretion of PTH by the parathyroid glands in response to hypercalcemia and is associated with hyperplasia of the glands (IRC related). Tertiary hyperparathyroidism, is a state of excessive secretion of PTH resulting from a long period of secondary hyperparathyroidism culminating in autonomous (unregulated) parathyroid function. Our short series of minimally invasive approach for Mediastinal Ectopic Parathyroid Adenoma consist in 7 cases o primary hyperparathyroidism (Thymus tissue

containing a tumoral nodule of monomorphic cells of parathyroid adenoma. Conclusion: Ectopic mediastinal parathyroid adenoma) solved with thoracoscopic approach and one case of case of tertiary hyperparathyroidism resolved robotically (A subtotal parathyroidectomy (35-50mg of parathyroid gland left in situ). No mortality, no morbidity, 2 days of hospital stay.

Conclusion: The ectopic mediastinal parathyroid adenoma is an uncommon cause of a rare disease that can be well localized using modern cross-sectional imaging. Minimally invasive procedure for the resection of ectopic mediastinal parathyroid adenoma is recommended where surgical expertise is available.

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OC-24

ABORDAREA ENDOSCOPICĂ RETROMUSCULARĂ ÎN REZOLVAREA HERNILOR SUBCOSTALE

ENDOSCOPIC RETROMUSCULAR APPROACH IN SUBCOSTAL HERNIA REPAIR

V. G. Radu, M. Lică

Life Memorial Hospital, Chirurgie, București, România

The lateral ventral incisional hernia repair, like subcostal incisional hernia, is a particular one in a therapeutical point of view, because of the nearest of the costal margin. We believe that endoscopic retro muscular approach is the surgical technique which can restore the best the architecture and the functionality of the abdominal wall. After improvement our technique in endoscopic retro-muscular approach in ventral hernia repair, we performed successfully the lateral ventral hernia repair - especially subcostal hernia. In this way we have added two advantages: advantages of MIS and place the mesh outside of the abdominal cavity. In this video we present a case with incisional recurrent right subcostal hernia after cholecystectomy repaired by endoscopic retro muscular approach.

OC-25

REZOLVAREA PE CALE LAPAROSCOPICĂ A UNEI HERNII PERINEALE DUPĂ REZEȚIE ABDOMINOPERINEALĂ PENTRU CANCER RECTAL

LAPAROSCOPIC REPAIR OF PERINEAL HERNIA AFTER ABDOMINAL PERINEAL RESECTION FOR RECTAL CANCER

M. Nadragea¹, O. Enciu¹, Elena-Adelina Toma¹, A. Miron²

¹*Spitalul Universitar de Urgență Elias, Clinica de Chirurgie, București, România*

²*Spitalul Universitar de Urgență Elias, Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Clinica de Chirurgie, București, România*

Background: Perineal hernia is a rare, but known complication following major pelvic surgery, such as: abdominoperineal resection or pelvic exenteration. Surgical repair has been previously described via transabdominal, transperineal, and combined approaches, using or not a mesh. Laparoscopic repair with mesh has been described for postoperative perineal hernia, mostly following laparoscopic abdominoperineal resection. We report such a case of perineal hernia repaired laparoscopically.

Case Report: A 53-year-old women with a history of T3N0 inferior rectal carcinoma who underwent laparoscopic abdominoperineal resection, after previous radio-therapy. Two years postoperatively, she presented with a symptomatic perineal hernia. Computed tomography of the pelvis confirmed the hernia without evidence of recurrent malignancy and the patient underwent a dual-mesh repair through a laparoscopic approach.

Discussion: Although the repair of perineal hernia remains challenging and only a few reports offer advice on how to manage this complication, the laparoscopic approach of postoperative perineal hernia is technically feasible and associated with rapid recovery and minimal complications. Because of the rarity of this condition, data are limited on the

short- and long-term outcome of laparoscopic repair. Similar to parastomal hernias, prophylactic mesh reinforcement of the pelvic floor could also be debated.

OC-26

STRATEGII DE REZOLVARE A HERNILOR ABDOMINALE LA PACIENȚII CU OBEZITATE MORBIDĂ

STRATEGIES FOR HERNIA REPAIR IN MORBIDLY OBESE PATIENTS

C. Copăescu, I. Hutopilă, Maura Buza, Simona Filip

Ponderas Academic Hospital, Bucharest, Romania

Background: Treatment of ventral abdominal hernias in patients with morbid obesity is challenging due to local and general particular conditions. Obesity is a risk factor for recurrence of hernia repair because of the increased abdominal pressure, technical difficulties following central adiposity, higher rates of wound complications and comorbidities (type II diabetes, cardiovascular and pulmonary disease) which in many cases are poorly controlled. As a result of these conditions, it seems that 20-28% of the morbidly obese patients undergoing abdominal surgery will develop incisional hernia.

Objective: is to develop a protocol to identify the optimal time for surgery and how to improve until then the unfavorable conditions related to obesity (medication /diet or metabolic surgery – staged approach), to establish which is the best surgical approach (open or laparoscopic).

Methods: In this study were included 89 obese patients with complex incisional hernia proposed for staged repair (stage 1 – Laparoscopic Gastric Sleeve Resection - to improve the local situation and metabolic consequences of the obesity; stage 2 - elective Laparoscopic Hernia Repair: planned to be performed 12-18 months after the metabolic operation). All the operations were performed in a Bariatric Center of Excellence and Hernia Center of Excellence – Ponderas Academic Hospital, in a period of time between 2012 and 2017.

Results: Laparoscopic sleeve gastrectomy was successfully performed in all included cases, without postoperative complications. Median excessive weight loss was 70% and the comorbidities were reduced up to 85%. The laparoscopic incisional hernia repair was later (12-18 months after bariatric surgery) performed in all the cases in very good technical conditions. The techniques used were intraperitoneal onlay mesh repair and retro-rectus abdominal wall reconstruction. Median time of surgery was 175 min and median length of stay of 4,5 days. In the postoperative period two patients developed seromas. No hernia recurrences were identified during the follow-up.

Conclusions: Morbidly obese patients with hernia should be carefully investigated and treated prior to surgery. The staged approach to complex incisional hernias repair in morbidly obese patients was feasible and safe, carrying important technical and medical advantages to the patients. Laparoscopic Gastric Sleeve Resection was safely performed with excellent metabolic outcome. The risk of incisional hernia recurrence is reduced by diminishing obesity risk factors.

OC-27

REPERE ANATOMICE ÎN ABORDUL EXTRAPERITONEAL ÎN CAZUL HERNIEI INGHINALE FĂRĂ FIXAREA MEȘEI

ANATOMICAL LANDMARKS IN TOTAL EXTRAPERITONEAL APPROACH FOR INGUINAL HERNIA WITHOUT MESH FIXATION

M. Beuran¹, I. Negoj¹, Adelina-Maria Cruceru¹, C. Cezar¹, Mihaela Vartic²

¹*Spitalul Clinic de Urgență, Chirurgie Generală III, București, România*

²*Spitalul Clinic de Urgență, Anestezie și Terapie Intensivă, București, România*

Introduction: Total extraperitoneal approach for laparoscopic inguinal hernia repair represents a challenging technique; the current evidence reveals the advantages associated with a minimally invasive technique, although significant perioperative complications could be present during the learning curve. The aim of the present study is to underline the boundaries of the preperitoneal space dissection with impact in laparoscopic inguinal hernia repair without mesh fixation.

Method: We have reviewed the videos of laparoscopic inguinal repair, operated during 2016 in Emergency Hospital of

Bucharest, and compared the boundaries of the preperitoneal space dissection from transabdominal and total extraperitoneal (with or without mesh fixation) approaches.

Results: We may conclude that in total extraperitoneal approach without mesh fixation the operating surgeon should pay significant attention to adequate dissection of preperitoneal space, especially in the area of the iliac fossa.

Conclusions: The total extraperitoneal approach is the most anatomical surgical technique of inguinal hernia repair; however, its dissection requires significant experience in laparoscopic techniques.

Key words: inguinal hernia, total extraperitoneal approach, mesh fixation, learning curve, preperitoneal space.

OC-28

REZOLVAREA LAPAROSCOPICĂ A HERNILOR OMBILICALE DE MICI DIMENSIUNI ȘI A HERNILOR EPIGASTRICE FOLOSIND „VENTRALEX™ HERNIA PATCH”

LAPAROSCOPIC SMALL UMBILICAL AND EPIGASTRIC HERNIA REPAIR USING “VENTRALEX™ HERNIA PATCH”

A. Nicolau, Raluca Vasile

Spitalul Clinic de Urgență, Chirurgie, București, România

The laparoscopic approach of abdominal ventral hernia gains a clear advantage in comparison with the open approach through the well known particularities of miniminvasive surgery and the low incidence of postoperative recurrences. We present the technique of laparoscopic small umbilical and epigastric hernia repair using a self-expanding polypropylene and ePTFE patch, circular shape, predimensionated, 8 cm in diameter, fixated with 4 transfascial sutures. The mesh is designed for tension-free open repair, intraabdominal placement. We used the technique to 21 patients without incidences and complications. Operative time was 50 min (45- 70 min), the postoperative hospital stay 1,7 days (1-4 days). The advantages are the circular shape, transfascial suturing and the costs. Laparoscopically we can verify the optimal deployment of the mesh.

OC-29

REZOLVAREA PE CALE ENDOSCOPICĂ RETROMUSCULARĂ A HERNILOR VENTRALE. STUDIU PROSPECTIV DE UN AN DE ZILE A EXPERIENȚEI UNUI SINGUR CHIRURG

THE ENDOSCOPIC RETROMUSCULAR APPROACH IN VENTRAL HERNIA REPAIR. 1 YEAR PROSPECTIVE STUDY - ONE SURGEON EXPERIENCE

V. G. Radu, M. Lică

Life Memorial Hospital, Chirurgie, București, România

The Rives-Stoppa procedure is the gold-standard in ventral hernia repair by open approach. The aim of this paper is to present the results of the endoscopic Rives-Stoppa procedure performed by a single surgeon during one year.

Methods: We collected prospective data of consecutive cases with ventral hernia repaired by endoscopic Rives-Stoppa procedure.

Results: We studied the patients with ventral hernia operated between June 2016 and June 2017: 34 cases. The mean age was 51 (± 13) years old, mean BMI 29.2 (± 5). The mean OR time was 202 (± 78) min, 11 patients needed TAR and the mean OR time was 262 (± 90) min and on the others 23 patients was performed endoscopic Rives-Stoppa with mean OR time 173 (± 53) min. The median defect area was 60 cm² (6-300) and the median mesh area was 450 cm² (100-750). The mesh was secured in place with glue (25 cases), tackers (1 case), sutures (1 case), tackers and sutures (1 case), tackers and glue (1 case), sutures and glue (3 cases), auto fixating mesh (1 case), non fixation (1 case). Median LOS 1 day (1-3). Follow-up at 1 week, 1 month, 6 months, 1 year. No recurrence until now.

Conclusion: The Endoscopic Rives-Stoppa procedure is safe and feasible and combines the advantages of MIS with the advantages of the retromuscular repair.

OC-30

CENTRU DE EXCELENȚĂ ÎN CHIRURGIA COLORECTALĂ: EXPERIENȚA PRIMULUI AN**CENTER OF EXCELLENCE IN COLORECTAL SURGERY: ONE YEAR MIS EXPERIENCE**

V. Tomulescu, C. Copăescu

Ponderas Academic Hospital, Bucharest, Romania

Background: Excellence is not simply an achievement; it is a culture that must be sustained. In September 2016, Ponderas Academic Hospital fulfilled the requirements and applied for Surgical Review Corporation (SRC) evaluation to obtain accreditation of Center of Excellence in Colorectal Surgery. On January, 2017 Ponderas Academic Hospital has been designated as an International Center of Excellence (CoE) in Colorectal Surgery by Surgical Review Corporation.

Aim: To analyze the outcomes of the first year activity of a SRC CoE in Colorectal Surgery.

Method: This is a prospective study started in September 2016 and we have analyzed our results until October, 2017. There have been 128 cases operated (all included) consisting in 74 males and 54 females. Mean age was 61,70 years (range 28-93). Conversion to open approach was related with laparoscopic exploration in emergency cases and has a 2,38% rate. Median operating time was 181 minutes (range 45-365 minutes). Median hospital stay 4 days. Out of them 9 cases have been operated by classic open approach (7%). There have been 5 cases with T4 tumors (one case of splenic angle colon cancer with gastric, spleen and diaphragmatic involvement, one case of splenic angle colon cancer with jejunum involvement, one case of rectal cancer recurrence, one case of rectal cancer with pelvic fascia involvement and one case with Mucocele of the appendix) Other 4 case have been operated in emergency (2 cases with Hinchey stage 4 Diverticulitis, one case with peritonitis and with colon necrosis due to Parkinson related Non-Occlusive Mesenteric Ischemia, one case with left colon cancer with obstruction and peritonitis due to cecum perforation.)

The procedure are listed in *Table 1*.

Results: The overall 30-day morbidity rate was noted to be 5,46% (7 cases). The overall anastomotic leak rate was 0 in our study. The overall 30-day mortality rate was 2,38% (3 cases - NOMI Parkinson disease related, MSOF in a patient with neglected diverticulitis peritonitis and oxygen dependent pulmonary fibrosis, Paracetamol induced liver failure). Pathological results for colorectal malignancies (106 cases -86%): colonic polyps 2 cases (benign), right colon cancer: 33 cases, T2-3 cases, T3-30 cases, Lymph nodes retrieval 14-28, transverse colon cancer 4pts (T3), Extended right hemicolectomy, Lymph nodes retrieval 13-18; left colon cancer: 29 - T2-6 cases, T3 21 cases, T4-2 cases, Lymph nodes retrieval 12-39, rectal polyps -8 cases, TEM -T1 6 cases, T2 2 cases, TME with no positive lymph nodes, rectal cancer 30, T2-2 cases, T3-23 cases, T4-6 cases, Lymph nodes retrieval 12-21, Distal margin negative 97%, Complete or nearly complete total mesorectal excision 97%.

Conclusions: Our good results are related with a multidisciplinary approach that identifies, coordinates, delivers and monitors the ideal treatment on a patient-by-patient basis. Our protocol consists in a well standardized technique, all operation are recorded and analyzed. The anastomosis are intra-corporeal performed, preferring an intra-corporeal L_T anastomosis with a careful stapling technique and a triple check (Bubble test, Endo-luminal, ICG).

Table 1.

endometriosis	8
diverticulitis	8
rectal polyps	8
colonic polyps	4
Hartman reversal	1
stoma revision	2
right colon cancer	33
transverse colon cancer	4
left colon cancer	29
rectal cancer	31

OC-31

SITUAȚII DIFICILE ÎN TIMPUL HEMICOLECTOMIEI DREPTE LAPAROSCOPICE**DIFFICULT SITUATIONS DURING LAPAROSCOPIC RIGHT HEMICOLECTOMY**V. Galu¹, M. Oun², C. Pîrîianu², A. Miron¹¹Universitatea de Medicină și Farmacie „Carol Davila”, Clinica de Chirurgie Elias, București, România²Spitalul Universitar de Urgență Elias, Clinica de Chirurgie Elias, București, România

The laparoscopic approach for colon cancer is part of our current practice, the benefits of minimally invasive surgery combined with the possibility of performing safe oncological procedures makes it a first choice technique for trained

surgical teams in centers with proper equipment. Laparoscopic right hemicolectomy is a standardized technique, quite easy for tumors in early stages. Locally advanced tumors can pose serious problems of surgical technique. We present two cases of laparoscopic right hemicolectomy performed for advanced tumors in obese patients, with a good postoperative outcome. The first case is a 70 years old female patient with a personal history of laparoscopic treatment for large umbilical hernia 3 years before, admitted for a locally advanced tumor of the cecum. To preserve the intraperitoneal mesh the laparoscopic approach was decided. After adhesiolysis a laparoscopic right hemicolectomy was performed, completion of tumor dissection, specimen extraction and ileocolic anastomosis were performed through a 10 cm right paramedian incision. The second case is a 62 years old male patient, admitted for a large tumor of the transverse colon with invasion of serosa. An extended right laparoscopic hemicolectomy was performed, specimen extraction and anastomosis were performed through a 10 cm incision above the umbilicus. Both cases prove that even locally advanced tumors can be approached laparoscopically with success in experienced surgical centers, but the surgical procedures are more difficult, feasible in respect of oncological safety.

OC-32

ABORDAREA LAPAROSCOPICĂ A TUMORILOR COLONICE DE UNGHI SPLENIC

LAPAROSCOPIC APPROACH OF THE SPLENIC FLEXURE TUMORS

D. Andrei, V. Tomulescu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Background: Large number of trials clearly showed the short-term advantages of the laparoscopic approach of the colon cancer and later, long term superiority. The minimally invasive approach is considered very challenging in case of splenic flexure tumors. Probably, as a consequence of technical difficulties, studies excluded patients with splenic flexure lesions. Main controversies include the appropriate extent of colon resection and lymph node dissection, the risk of inadvertent splenectomy and type of anastomosis.

Methods: Our experience includes 21 patients with splenic flexure carcinoma operated laparoscopically. Totally obstructing tumors or locally advanced cancers were limited to diverting procedures/diagnostic laparoscopy (an open resection was the operation of choice). Main procedure was left hemicolectomy, but also intermediate colectomy and seminary colectomy were performed due to patient's age, comorbidities, tumor grading and stage. All the patients entered the follow-up program for 36+/- 18 months.

Results: Mean harvested nodes were 20,2 +/- 5. The number of patients for each tumor stage was (I, II, III, IV): 6-8-6-1. Mean hospital stay was 5+/- 2 days. Thirty days mortality was 0. We had no leaks. We had one conversion due to locally advanced cancer. One patient developed distant disease, with liver metastases. No patient encountered local recurrence till now.

Conclusions: Laparoscopic resection is feasible and safe for patients with early stage splenic flexure cancer. It is a challenging technique, especially the total intracorporeal. The outcomes of laparoscopic splenic flexure cancers resection are similar to those of laparoscopic resections for cancer in other colonic locations. This technique needs to be confirmed by multi-centric prospective studies and in large cohort of patients.

Key words: splenic flexure tumors, laparoscopy

OC-33

REZEȚIILE COLORECTALE PRIN ABORD LAPAROSCOPIC VERSUS CLASIC. REZULTATE FINALE ALE UNUI STUDIU PROSPECTIV, COMPARATIV ASUPRA EVOLUȚIEI PERIOPERATORII ȘI POSTOPERATORII IMEDIATE

LAPAROSCOPIC VERSUS OPEN COLORECTAL RESECTIONS. FINAL RESULTS OF A COMPARATIVE PROSPECTIVE STUDY ON PERIOPERATIVE AND SHORT-TERM POSTOPERATIVE OUTCOME

V. Bintișan¹, Ioana Bota¹, Andreea Cordoș¹, R. Seicean¹, Cristina Tîcra¹, K. Fressman¹, Maria Ceaglei¹, G. Dindelegan¹, Adriana Bintișan², R. Chira²

¹Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Chirurgie I, Cluj-Napoca, România

²Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Medicală I, Cluj-Napoca, România

Laparoscopic colorectal resections have emerged as a viable alternative to the open approach. However, the technique is

complex, as it requires dissection in various quadrants of the abdomen and in the pelvis, extended lymphadenectomy and complex reconstruction procedures. Hence, the question arises if it can provide results similar with the open approach. Starting from 2009, patients with colorectal diseases operated by our surgical team whose data were recorded strictly in a prospective manner have been included in this study that analyzed the patient's and tumor's characteristics and the short-term perioperative outcome. In total, 167 patients were evaluated of which 71 in the laparoscopic (LAP) group and 96 in the open (OPEN) group. Patients with benign tumors were present mostly in the LAP group while cases with higher morbidity (ASA III+IV) and patients with advanced rectal cancers were more frequent in the OPEN group. There were no differences regarding location of the tumor, operative time, incidence of splenic flexure take-down or of the medial-to-lateral dissection between the two groups. However the blood loss, stay in the ICU, postoperative stay and time to start adjuvant chemotherapy were significantly lower in the LAP group along with a significantly faster postoperative recovery. In conclusion, there may be a selection bias to offer laparoscopy to less morbid patients, with less advanced rectal cancers or benign tumors but the short-term benefits of laparoscopy are obvious and that includes a quicker start of adjuvant chemotherapy that could provide a survival advantage on the long term.

OC-34

ICG ÎN CHIRURGIA COLORECTALA - STANDARD ÎN CENTRUL DE EXCELENȚA PAH

ICG IN COLORECTAL SURGERY - STANDARD IN PAH CENTER OF EXCELLENCE

B. Smeu, V. Tomulescu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Background: leaks after colorectal surgery are one of the most serious postoperative complications and can occur in up to 7% of cases in right colorectal surgery and up to 16% in left colic and rectal surgery, increasing length of hospital stay, health care costs, morbidity and mortality. The well-known patient related risk factors are: male sex, higher BMI, poor nutrition and high ASA score. The disease related risk factors are: the level of the anastomosis, neoadjuvant therapy and tumor size. The intraoperative related risk factors are blood perfusion to the anastomotic tissue or stapled line, tension on the anastomosis, operative time, blood loss and number of stapler firings.

Aim: to develop a protocol for using the ICG as a supplementary testing tool for leaks prevention after colorectal surgery.

Methods: Indocyanine green fluorescence arteriography (ICG-FA) uses a sterile, anionic, water-soluble, tricarbocyanine compound dye as an optical contrast agent. ICG absorbs NIR (near infra-red) light and emits a slightly longer wavelength which is then recorded with special equipment. The ICG is administrated IV by the anesthesiologist and is only present in viable, proper vascularized tissues, thus empowering the colorectal surgeon to make a good decision when there are doubts about anastomotic tissue viability, or when you have a patient with major risk factors for fistula.

Results: after starting using ICG for colorectal surgery in the last year, we were able to change the site for 2 anastomoses with poor vascularization of the colic or rectal stump in patients with left colectomies (poor colic vascularization) and correct a colorectal anastomosis by over sewing a poor vascularized corner (ischemic gap).

Conclusions: the intraoperative testing of tissue viability with ICG is a valuable tool for the surgeons performing colorectal surgery and its routine use should be implemented as a third check-point for anastomosis after bubble test under immersion and trans anal video inspection.

OC-35

ABORDAREA MINIMAL INVAZIVĂ A LITIAZEI COLEDOCIENE

MINIMALLY INVASIVE SURGICAL TREATMENT OF COMMON BILE DUCT LITHIASIS

V. Gavrilovici¹, A. Nistor¹, P. Velnic¹, Agata Petrescu², I. Cordoș¹, B. Găinaru¹, D. Stănescu³, Liliana Gheorghe⁴, F. Terteliu⁴

¹*Spitalul de Urgență „Sfântul Ioan cel Nou”, Chirurgie Generală, Suceava, România*

²*Spitalul de Urgență „Sfântul Ioan cel Nou”, Radiologie, Suceava, România*

³*Spitalul de Urgență „Sfântul Ioan cel Nou”, ATI, Suceava, România*

⁴*Centrul de Explorare Imagistică Explora, Radiologie, Suceava, România*

Common bile duct lithiasis may be solved either sequentially, first by endoscopy and secondly by surgery or by one-stage laparoscopic approach management. We have started the latter one in 2016 and present our results. Between 01/03/2016 and 31/07/2017 we had 14 patients with common bile duct lithiasis referred for laparoscopic procedure for stone removal; it was successful in 12 cases. A total of 9 patients underwent choledochotomy with removal of the stones by choledochoscopy while in 3 cases the approach was exclusively via cystic duct. We performed biliary drainage in 9 patients. Postoperative outcome was uneventful excepting in one patient who developed enteric infection with *Clostridium difficile*. Minimally invasive approach for common bile duct lithiasis is safe and effective, comparable to two-stage management but with less total cost.

OC-36

LITOTRIPSIE COLEDOCOSCOPIA CU LASER HOYAG - MODALITATE NOUA DE REZOLVARE A LITIAZEI COLEDOCIENE LASER HOYAG CHOLEDOCOSCOPIC LITHOTRIPSY - A NEW WAY TO ADDRESS CBD STONES

S. Velici, G. Nița, V. Tomulescu, F. Turcu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

We present the case of a 45 years old male patient, admitted for obstructive jaundice due to CBD stones. RM Cholangiography identified multiple gallbladder stones and three stones into the Main Bile Duct, 2 in size of about 3-4mm and one over 1cm, located at approx. 26mm cranial to Ampulla Vater. Patient underwent ERCP in emergency, papilla-sphincterotomy and extraction of the two smaller stones being performed, but the 1 cm stone remained blocked in a recalibration portion of the CBD. After ERCP, patient developed a mild pancreatic inflammation syndrome, which postpone surgery. 6 days later patient underwent laparoscopic surgery, an incomplete cholecystectomy and fragmentation of the stone in situ was performed using trans cystic LASER HoYAG lithotripsy. For this procedure we used equipment routinely used in urological procedures, thing that can increase the reliability of this method by eliminating the financial issues that is preventing access to this procedure in most of the Romanian hospitals. The postoperative evolution was uneventful. No recurrence has been encountered in 6 months follow-up.

OC-37

FISTULOJEJUNOSTOMIE ROUX-EN-Y LAPAROSCOPICĂ PENTRU FISTULĂ PANCREATICĂ EXTERNĂ DUPĂ PANCREATITĂ ACUTĂ NECROTICĂ

LAPAROSCOPIC ROUX-EN-Y FISTULOJEJUNOSTOMY FOR EXTERNAL PANCREATIC FISTULA AFTER ACUTE NECROTIC PANCREATITIS

F. Zaharie¹, C. Zdrehuș², C. Popa³, Roxana Zaharie⁴, Andrada Văduva³, I. Balint³, C. Iancu¹

¹*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Chirurgie 3, Cluj-Napoca, România*

²*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, ATI, Cluj-Napoca, România*

³*Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Chirurgie 3, Cluj-Napoca, România*

⁴*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Medicală 3, Cluj-Napoca, România*

Introduction: An external pancreatic fistula is a persistently draining sinus tract connecting a major pancreatic duct (disconnect duct sindrom) to the skin, usually at the abdominal wall. The optimum time period for the development of fibrous connective fistula is 3-6 months after surgery.

Aim: We present a case report 55 years old female with an external pancreatic fistula with debit 200-250 ml/day 6 months after laparoscopic drainage and necrosectomy for acute necrotic pancreatitis. CT scan and MRI demonstrated transection of the pancreas and lack of substance between the head and the tail of the pancreas. Endoscopic retrograde cholangio-pancreatography confirmed a complete ductal disruption, stenting across the disruption was attempted and failed.

Results: We performed a laparoscopic Roux-en-Y fistulojejunostomy (end to side) with separately sutures and mechanic anastomosis for Roux loop. The time of intervention was 220 minutes, blood losses 400 ml, and length of hospital stay 6 days. Pancreatic MRI realized 6 months after surgery revealed no collections and good functioning of the anastomosis.

Conclusion: Pancreaticocutaneous fistula can be successfully managed with minimally invasive techniques. To our knowledge this is the first report of an external pancreatic fistula after necrotic acute pancreatitis successfully treated with laparoscopic Roux-en-Y fistulojejunostomy.

OC-38

PROSTATECTOMIA RADICALĂ LAPAROSCOPICĂ - EXPERIENȚA INSTITUTULUI ONCOLOGIC CLUJ-NAPOCA

LAPAROSCOPIC RADICAL PROSTATECTOMY - THE ONCOLOGY INSTITUTE'S SURGICAL TEAM EXPERIENCE

B. Petruț, D. I. Feflea, V. C. Munteanu

Institutul Oncologic „Prof. Dr. Ion Chiricuță”, Urologie, Cluj-Napoca, România

Introduction: Laparoscopic radical prostatectomy is one of the most challenging laparoscopic surgeries in urology due to its excisional and reconstructive nature.

Materials and Method: Between June 2010 and July 2017, 218 radical laparoscopic prostatectomies were performed by the surgical team at the Oncological Institute in Cluj-Napoca. The addition of the laparoscopic 3D system in October 2013 has since dramatically improved the perioperative parameters.

Results: Mean operative time, along with the rest of the perioperative parameters have significantly improved with the introduction of the 3D optic system and the increasing experience of the surgical team after passing the learning curve. The mean operative time was 84 minutes, 102 respectively when a extendend pelvic node dissection was performed. Mean blood loss was 200mL. The time required for the urethro-vesical anastomosis dropped significantly since the introduction of the 3D system. Mean anastomosis time for the last 100 cases was 16 minutes. Pelvic drainage was removed after 3.7 days. Mean discharge time was 5.5 days.

Conclusions: Although the laparoscopic radical prostatectomy is a challenging surgical procedure it has become a routine intervention in our clinic due to the surgical team's experience which has long passed the learning curve and due to the 3D optical system.

OC-39

REZULTATE FUNCȚIONALE ȘI ONCOLOGICE DUPĂ PROSTATECTOMIA RADICALĂ LAPAROSCOPICĂ - EXPERIENȚA PONDERAS ACADEMIC HOSPITAL

ONCOLOGIC AND FUNCTIONAL RESULTS AFTER LAPAROSCOPIC RADICAL PROSTATECTOMY - PONDERAS ACADEMIC HOSPITAL EXPERIENCE

G. Nita¹, M. G. Onaca², M. Manu¹, K. L. Adou¹, G. Tie¹

¹*Ponderas Academic Hospital, Bucharest*

²*Saint Antonius Hospital, Utrecht, The Netherlands*

Introduction and Objectives: Laparoscopic radical prostatectomy (LRP) is considered to be the standard treatment for localized prostatic cancer (PCa) in many clinics. LRP has been adopted by our department as the first line treatment for localized prostatic cancer and life expectancy over 10 years. We describe the procedure and its technical difficulties, complications, oncologic and functional results.

Methods: From January 2015 to March 2017 we have performed 45 LRPs in our institution. The team consists of a member with extended expertise in robotic and LRPs. In all cases, LRP was performed for localized prostate cancer. The standard preoperative protocol included blood tests, prostate biopsy, pelvis MRI and bone scintigraphy. The average patient's age was 68 years (range 45 – 74 years), mean preoperative prostate specific antigen (PSAi) level was 8ng/mL (range 3–15ng/mL) and prostatic volume between 26 and 52 cc. The procedure's time was standard: endopelvic fascia incision, extrafascially prostate dissection, dorsal vein complex hemostasis, urethral transection and vesico-urethral anastomosis.

Results: The laparoscopic approach was followed through in all cases – no conversions to open surgery. Bilateral nerve sparing was performed in 7 cases (16%) and unilateral in 23 cases (51%). The mean operative time was 165 minutes (range 120 - 240 min), while the average blood loss was 255 mL (range 20–800) and two patients received blood transfusions. The mean catheterization time was 10 days (range 7–14 days). Positive surgical margins were observed in 8 cases (17.7%). Overall, 86% respectively 93% of the patients were continent during the following 3 and 6 months. 51% of the patients had erectile dysfunction 6 month after the intervention. There were no major complications.

Conclusions: The radical laparoscopic prostatectomy is a safe and efficient procedure for localized prostate cancer with minimal complications and short hospitalization time, but it requires an experienced team of laparoscopic surgeons. The functional and oncological outcomes of LRP are increasing with experience. Supervision by experts and modular training programs can significantly shorten the learning curve and offer acceptable results and oncologic outcomes in the initial patient series.

OC-40

NEFRECTOMIA RADICALĂ LAPAROSCOPICĂ - EXPERIENȚA INSTITUTULUI ONCOLOGIC CLUJ-NAPOCA

LAPAROSCOPIC RADICAL NEPHRECTOMY - THE ONCOLOGY INSTITUTE'S SURGICAL TEAM EXPERIENCE

B. Petruț, D. I. Feflea, V. C. Munteanu

Institutul Oncologic „Prof. Dr. Ion Chiricuță”, Urologie, Cluj-Napoca, România

Introduction: Laparoscopic radical nephrectomy is the standard surgical treatment for stage T2 renal tumors according to the EAU Guidelines.

Materials and Methods: There were 138 laparoscopic radical nephrectomies performed between March 2009 and July 2017 by the surgical team at the Oncology Institute in Cluj-Napoca. While initially performed through a retroperitoneal access, the standard approach in our institution is the transperitoneal approach. The passing of the learning curve and the addition of the laparoscopic 3D system has allowed the surgical team to tackle larger tumors and more complex renal pedicles.

Results: Most of the operative parameters have improved along the learning curve and with the introduction of the 3D optic system. Mean operative time was 73 minutes. Mean tumor size was 7.8 cm, while mean blood loss was 150 mL. Drains were removed after a mean of 3.3 days. Mean hospital stay was 5.1 days.

Conclusions: Laparoscopic radical nephrectomy is the standard treatment for T2 renal tumors and localized masses not treatable by partial nephrectomy. Due to the experience of the surgical team at the Oncological Institute in Cluj-Napoca this surgical procedure has become a routine intervention.

OC-41

URETEROSCOPIA ÎN TRATAMENTUL LITIAZEI DE TRACT URINAR SUPERIOR

URETEROSCOPY IN THE TREATMENT OF UPPER URINARY TRACT LITHIASIS

Ana Vieru¹, D. Bădescu², T. Constantin², R. Petca², T. Radu², D. Radavoi², C. Toma³, C. Sima², V. Jinga², Ș. Rascu²

¹*Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Facultatea de Medicină, București, România*

²*Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Spitalul Clinic „Prof. Dr. Th. Burghel”, Clinica de Urologie, București, România*

³*Spitalul Clinic „Prof. Dr. Th. Burghel”, Urologie, București, România*

Introduction and Objectives: In the latter part of the 20th century the prevalence of upper urinary tract stones increased worldwide, making it an important public health issue. The objective of this paper was to assess the retrograde ureteroscopy in the treatment of upper urinary tract lithiasis in terms of results and safety profile.

Material and Method: 112 patients, 64 males and 48 females, underwent retrograde semi-rigid ureteroscopy for urinary lithiasis between July and December 2011. General, preoperative, intraoperative and postoperative parameters of the study group were analyzed.

Results: The mean age was 45,67 years old, 50% of the patients had a normal BMI, 45% of them were overweight and 5%

of them had grade I obesity. ASA risk was 65% ASA I, 31% ASA II and 4% ASA III. Preoperative average value of serum creatinine was 1,24, 4% of the patients having a solitary kidney. Stone location was in 13% of cases in the superior lumbar, 34% - mid-lumbar and 53% - in the pelvic ureter. 13% of patients had a single stone and 87% of patients had multiple stones. Mean stone dimension was 7,01 mm (3 - 25 mm). Mean operating time was 28 minutes, ranging from 10 to 55 minutes. 92% of patients had an ureteral stent mounted, 5% had no stent mounted and 3% had a nephrostomy mounted. Intraoperative stone-free rate was 92%, while postoperative stone free rate was 90%. Rate of complications was low - 5% - Clavien grade I, II and III. Mean hospital stay was 2,7 days.

Conclusion: Retrograde ureteroscopy remains the gold-standard treatment for ureteral stones, accessible for most of the urological services, with a low degree of complications, satisfying results in terms of stone free rates, hospital stay and treatment costs.

OC-42

ABORDUL ENDOSCOPIC MULTIMODAL AL LITIAZEI RENALE CORALIFORME: O PROVOCARE TERAPEUTICĂ MULTIMODAL ENDOSCOPIC APPROACH FOR RENAL STAGHORN LITHIASIS

G. Nita, K. L. Adou, G. Tie

Ponderas Academic Hospital, Bucharest

Introduction and objectives: The treatment of renal staghorn calculi still represents a challenge for the urologists. In these cases, percutaneous nephrolithotomy (PCNL) was the ideal treatment option, but the residual stone fragments were frequent. Introduction of the new generation of flexible ureteroscopes, which have a greater deflection angle and allow easier access to the all of renal calix, makes an efficient alternative for patients with multiple residual caliceal stones after initial PCNL. The purpose of this paper is to analyze the results of multimodal approach in these cases with staghorn calculi.

Material and method: Between January 2013 and March 2017, at Ponderas Academic Hospital 35 patients with staghorn renal stones underwent multimodal treatment: PCNL as first-time treatment and flexible ureteroscopy with Ho: YAG laser lithotripsy for residual stones. 4 cases presented single renal unit. We used a Storz instruments: mini PCNL systems (16 CH) and Flex Xc flexible ureteroscope coupled with either a Dornier Holmium laser (20W), Cook laser (30W) or a Lumenis laser (100W). We analyzed the preoperative characteristics of the patients, intraoperative parameters and postoperative results.

Results: All the patients underwent mini PCNL as first operation session. 5 cases were stone free after this procedure and none of these required another intervention. Residual stones (superior and medium calix) were described in 30 cases (85.5%) and the flexible ureteroscopy at 7-14 day after initial mini NLP was needed. Among the 30 cases, for 25 cases one procedure was enough and 5 cases, with residual stone greater than 3 cm, needed two procedures. The overall stone free rate was 98%. Minor complications (fever, hematuria, flank pain) were present. The hospitalization time was 24 hours. No major complications were reported.

Conclusions: Multimodal endoscopic approach of staghorn calculi is an efficient alternative with a stone free rate over 90% and minimal complications. Having the right equipment is the key to surgical success.

OC-43

TRATAMENTUL CU TOXINĂ BOTULINICĂ AL HIPERACTIVITĂȚII DETRUSORIENE DE ETIOLOGIE NEUROLOGICĂ BOTULINUM TOXIN A FOR THE TREATMENT OF NEUROGENIC DETRUSOR OVERACTIVITY

C. Persu, V. Jinga

Spitalul Clinic „Prof. Dr. Th. Burghel”, Urologie, București, România

Introduction: Botulinum toxin is one of the most used second line treatments for neurogenic detrusor overactivity (NDO). Our study aims to present our experience with Abobotulinumtoxin A in patients with spinal cord injury (SCI) and multiple sclerosis (MS).

Material and Methods: Our series include 47 patients (31 males, 16 females), aged 24 to 67 years old, with confirmed

detrusor overactivity of neurological ethiology. The patients underwent invasive urodynamics before the first treatment and at least once during a follow up visit. The injection technique involves standard cystoscopy with 20 injection sites (25 U per site) across the detrusor, using a Storz dedicated needle, under spinal anesthesia. Antibiotic prophylaxis was used. Urine culture was performed before and one week after the procedure. We also compared the cost of the procedure with the cost of the antimuscarinic treatment.

Results: The follow up period ranges from 6 months to 4 years, with a total of 24 patients who underwent at least two injection procedures. The patients became asymptomatic (47% - 22 cases) or showed a significant reduction of their urinary symptoms (41% - 19 patients) shortly after the treatment. Retreatment was performed based on patient reported symptoms and urodynamics, after 9 to 18 months, leading to similar results compared to the initial treatment. Common complications include bleeding/hematuria (no action taken), UTI or increased PVR. No case of acute urinary retention or systemic reaction was seen.

Conclusion: Abobotulinumtoxin A is safe and effective, and the higher cost of the toxin is balanced for some patients by the long term symptom relief. It should not be recommended as first line therapy due to the potential risk associated with it.

OC-44

NEFRECTOMIA PARȚIALĂ LAPAROSCOPICĂ - EXPERIENȚA INSTITUTULUI ONCOLOGIC CLUJ-NAPOCA

LAPAROSCOPIC PARTIAL NEPHRECTOMY - THE ONCOLOGY INSTITUTE'S SURGICAL TEAM EXPERIENCE

B. Petruț, D. I. Feflea, V. C. Munteanu

Institutul Oncologic „Prof. Dr. Ion Chiricuță”, Urologie, Cluj-Napoca, România

Introduction: Partial nephrectomy is the standard treatment for stage T1 renal masses according to the EAU guidelines. The laparoscopic approach, due to its high level of complexity, is reserved for an experienced surgical team, due to the fact that both the excision of the renal mass and the nephrorraphy must be performed under a time constraint - the warm ischemia time.

Materials and Method: The surgical team at the Oncology Institute in Cluj-Napoca has performed 112 laparoscopic partial nephrectomies between April 2009 and July 2017. For small, exophytic tumors a zero-ischemia technique was applied in order to minimize renal parenchymal loss.

Results: Mean operative time was 118 minutes. Mean tumor diameter was 7.8cm. As the team was gaining experience in the laparoscopic approach larger and more complex tumors were tackled. Warm ischemia time was 12 minutes for the last 30 surgeries, while de median for the previous ones was 17 minutes, with an excision time of 4,6 and 6.7 minutes respectively. Mean blood loss were 210mL. Abdominal drains were removed after 4.2 days. Mean hospital stay was 6.1 days.

Conclusions: Radical partial nephrectomy is a very complex surgical procedure but has the advantage of superior functional outcomes when compared radical nephrectomy. The experience of the surgical team has allowed the approach of larger and more complex renal tumor that would have been otherwise removed by radical nephrectomy.

OC-45

MODALITĂȚI DE ÎNCHIDERE A PODELEI SELARE DUPĂ ABORDAREA ENDOSCOPICĂ TRANSFENOIDALĂ

CLOSURE METHODS OF THE SELLAR FLOOR AFTER TRANSSPHENOIDAL ENDOSCOPIC APPROACH

B. Mocanu¹, S. Stoica², S. Oprescu¹, Anca Vișan³

¹*Brain Institute - Spitalul Monza, ORL, București, România*

²*Brain Institute - Spitalul Monza, Neurochirurgie, București, România*

³*Brain Institute - Spitalul Monza, ATI, București, România*

The authors are presenting their experience in the closure of sellar floor after endoscopic transnasal transsphenoidal approach of pituitary adenomas and craniopharyngiomas. The single nostril approach with the rostrum sphenoidale ablation, the superior turbinate preservation and the maintenance of nasal mucosa integrity in the contralateral nasal fossa are making possible the adequate broad and in total safety at the pituitary fossa level. At the end of the surgical intervention the sellar floor is closed using allografts or xenografts, from adipose tissue, muscle, fascia latta, bone graft, to

adhesive glue and titanium plates that will ensure the necessary rigidity to the skull base. A resistant retentive cavity can be assured by the dura mater suture with non-absorbable suture 6.0 with a "sliding knot". In the last nine years the mixed surgical team ENT - neurosurgery has used all the closure methods of the hypophyseal fossa described in the specialty literature. In the current paper the most used methods are presented according to the approached pathology.

Conclusions: The efficient closure of the sellar floor creates in postoperative the conditions of a quick scar without complications and with a fast discharge.

OC-46

CHIRURGIA ENDOSCOPICĂ ÎN TUMORILE DE BAZĂ DE CRANIU LA COPII

ENDOSCOPIC SURGERY IN PEDIATRIC SKULL BASE TUMORS

B. Mocanu¹, Alina Ciocâlțeu², C. Mocanu³, Georgeta Mocanu⁴, S. Oprescu¹

¹*Brain Institute - Spitalul Monza, ORL, București, România*

²*Spitalul Clinic de Urgențe Oftalmologice, Oftalmologie, București, România*

³*Clinica ORL Dr. Mocanu, ORL, București, România*

⁴*Clinica ORL Dr. Mocanu, Laborator Clinic, București, România*

The authors would like to present their experience in approaching conditions in the pediatric benign tumors of the nasal cavity and paranasal sinuses through endoscopic surgery. In this paper we present some complex maneuvers for resection of an ethmoidal encephalocele at a three months old baby, excision of a meningoencephalocele at a two and a half years old child, a meningocele at a child of seven years, a case of clivus chordoma at a six years old child and a very rare case of juvenile fibromatosis at a 2 years old child. We emphasize the key moments of the surgical intervention - intraoperative closure of CSF leak, efficient hemostasis, the usage of suspension microlaryngoscopy instruments during the resection of tumors in the retrosphenoidal region and the utility of the surgical navigation system and the intraoperative CT-scan and MRI. All the interventions described were performed exclusively by a mono disciplinary ENT surgical team.

OC-47

CUM A SCHIMBAT ABORDAREA LAPAROSCOPICĂ APENDICECTOMIA. STUDIU PROSPECTIV REPETAT LA 8 ANI ÎNTR-UN SPITAL TERȚIAR DE URGENȚĂ

HOW LAPAROSCOPY HAS CHANGED THE FACE OF APPENDECTOMY. A PROSPECTIVE STUDY REPEATED EIGHT YEARS LATER IN A TERTIARY EMERGENCY HOSPITAL

V. Bintintan, Alina Zielonka, Teodora Breban, Andreea Cordoș, R. Seicean, R. R. Scurtu, G. Dindelegan, R. Drasovean, R. Oana, C. Ciuce

Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Chirurgie I, Cluj-Napoca, România

Laparoscopic appendectomy has emerged as a valuable alternative to open surgery. As generations of surgeons are changing so increases the penetration of newer techniques in the daily surgical practice. We have performed two prospective studies that analyzed the incidence of laparoscopic (LAP) appendectomy in our surgical department in two distinct periods of time, separated by a decade. Group 1 included 227 patients operated in years 2007-2008 and Group 2 included 159 patients operated in the year 2017. The incidence of laparoscopic appendectomy increased from 16% of cases in Group 1 to 85% in Group 2. In Group 1, the LAP group had significantly lower intensity pain scores, earlier ambulation and reduced postoperative stay however on subjective evaluation a better cosmetic results could not be demonstrated. Group 2 shows that operative time is even shorter in the LAP group, and confirmed the advantage of laparoscopy regarding postoperative stay. Average hospital stay decreased from 9.36 days in the OPEN group in 2007 to 3 days in the LAP in 2017. In this period of time, three surgeons retired, only of them 1 being acquainted with laparoscopic techniques while other three young surgeons obtained leading positions in the emergency surgical teams, all of them with above-average experience in laparoscopic surgery. In conclusion, as new generations of surgeons take leading positions in emergency surgical teams, the benefits of minimally-invasive surgery are recognized triggering a significant shift towards laparoscopic appendectomy in the daily surgical practice.

OC-48

ESTE SIGURĂ COLECISTECTOMIA LAPAROSCOPICĂ ÎN PRIMELE 24 DE ORE DE LA ADMISIA PENTRU COLECISTITĂ ACUTĂ LITIAZICĂ?**IS LAPAROSCOPIC CHOLECYSTECTOMY SAFE IN THE FIRST 24 HOURS OF ADMISSION FOR LITHIASIC ACUTE CHOLECYSTITIS?**

D. A. Brebu, F. Lazăr, S. Pantea, C. Lazăr, A. Dobrescu, C. Tartă, Iuliana Mihail, C. Duță

Spitalul Clinic Județean de Urgență „Pius Brînzeu”, Clinica Chirurgie II, Timișoara, România

Aim of study: Laparoscopic cholecystectomy performed in immediate emergency for lithiasic acute cholecystitis (AC) is increasingly used in centers with experience. Studies show that there are no statistically significant differences between laparoscopic cholecystectomy performed in immediate urgency (72 hours from onset) and postponed cholecystectomy. Is the technique safe within the first 24 hours of admission?

Material and Method: There were retrospectively analyzed 193 patients admitted with AC between January 2015 and June 2017 in Clinic II Surgery of SCJUT. Patients showed right upper quadrant pain, fever, localized peritoneal irritation, ultrasound signs of AC (distended gallbladder with thickened walls > 4-5 mm, sandwich sign, fluid around the gallbladder), leukocytosis > 10,000 bcc. All patients were operated within the first 24 hours of admission. They excluded patients with signs of common bile duct stones, jaundice or AC-associated pancreatitis.

Results: Out of 193 patients, 116 were with vesicular hydrops; 53 presented CA phlegmonous +/- pericholecystic fluid; 24 showed gangrenous AC with localized peritonitis fluid. The conversion rate to open surgery was 5.7% (11 patients). Iatrogenic lesions in 3 cases (1.6%). Postoperative complications (Clavien I-V) 12% (23 patients). Mortality 0.5% (1 patient).

Conclusions: Laparoscopic cholecystectomy in immediate emergency within the first 24 hours of admission is a safe approach in patients without signs of common bile duct stones, jaundice, or pancreatitis associated with AC. The morbidity and mortality obtained is similar to other types of approaches according to recent studies. The experience of the surgical team is the key point of this type of approach.

OC-49

ABORDUL MINIM INVAZIV ÎN ABDOMENUL ACUT CHIRURGICAL - EXPERIENȚA CLINICII DE CHIRURGIE DIN SPITALUL CLINIC DE URGENȚĂ „BAGDASAR ARSENI” BUCUREȘTI**MINIMALLY INVASIVE APPROACH IN ACUTE ABDOMEN-EXPERIENCE OF THE GENERAL SURGERY CLINIC WITHIN THE “BAGDASAR-ARSENI” EMERGENCY CLINICAL HOSPITAL**

C. G. Florea¹, I. S. Coman¹, Elena Violeta Coman¹, Oana Ilona David¹, V. A. Porojan¹, Raluca Maria Cîrstina², V. T. Grigorean¹

¹*Spitalul Clinic de Urgență „Bagdasar-Arseni”, Chirurgie Generală, București, România*

²*Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Facultatea de Medicină, București, România*

Introduction: In recent years, laparoscopic approach has become the main method of surgical approach in more and more pathologies of intraperitoneal organs. In the case of acute abdominal surgery, laparoscopy can be both a diagnostic method and a treatment method.

Materials and Methods: We performed a retrospective analysis of the patients who presented in the last 3 years with acute surgical abdomen and who had been chosen for the laparoscopic approach at “Bagdasar-Arseni” Emergency Clinical Hospital.

Results: In most cases, laparoscopic exploration of the peritoneum reveal the accurate diagnostic, the surgery being performed by laparoscopic most often. The main causes of acute peritonitis treated laparoscopically were perforated gastro-duodenal ulcer, acute appendicitis, acute cholecystitis, intestinal occlusions by flange and rupture of an ovary cyst. The need for conversion to classical surgery was present in a small proportion of patients who were tempted to laparoscopic approach, most often being converted the cases of acute peritonitis produced by abdominal intraperitoneal tumor formations. The patient's postoperative progression was almost entirely favorable, with minimal complications and mortality.

Conclusion: In the case of acute surgical abdomen, laparoscopy is one of the best methods in establishing the accurate

diagnostic, as well as a therapeutic alternative in more acute pathologies of intraperitoneal organs, its minimally invasive character ensuring a faster recovery of the patients and a small rate of complications.

OC-50

ESTE LAPAROSCOPIA ÎNCĂ UTILĂ ÎN TRATAMENTUL LITIAZEI URETRALE GIGANTE?

IS STILL LAPAROSCOPY USEFUL TODAY IN THE TREATMENT OF GIANT URETERAL STONES?

M. Litescu¹, V. Mirciulescu², M. G. Onaca³, D. Georgescu⁴, N. Iordache¹

¹*Spitalul Clinic de Urgență „Sf. Ioan”, Universitatea de Medicină și Farmacie „Carol Davila”, Clinica de Chirurgie Generală, București, România*

²*Spitalul Clinic de Urgență „Sf. Ioan”, Clinica de Urologie, București, România*

³*Sint Antonius Ziekenhuis, Departamentul de Urologie, Utrecht, Olanda*

⁴*Spitalul Clinic de Urgență „Sf. Ioan”, Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Clinica de Urologie, București, România*

The treatment of ureteral lithiasis has undergone numerous changes over the last decades in the context of improving the technical means that surgeons and urologists have at their disposal. Technological advances have allowed the replacement of traumatic, degrading methods of the abdominal wall with various minimally invasive techniques that treat kidney lithiasis without traumatic abdominal wall or with minimal trauma. Today we can choose between extracorporeal, percutaneous, ureteroscopic lithotripsy, laparoscopic ureterolithotomy, or open surgery. Establishing the indication for the approach is dependent on a number of factors including the general condition of the patient, the anesthetic-surgical risk, the degree of damage to the kidney function in general, the functional reserve of the affected kidney and, last but not least, the size and number of calculi. Starting from a case of giant ureteral lithiasis resolved laparoscopically, there are reviewed the literature on the treatment of giant ureteral lithiasis and the most appropriate variants of approach.

OC-51

COMPLICAȚIILE CHIRURGIEI AVANSATE A ENDOMETRIOZEI PROFUND INFILTRATIVE

ADVANCED SURGERY RELATED COMPLICATIONS IN DEEP INFILTRATING ENDOMETRIOSIS

V. Simedrea, R. Petrică, Corina Dud

Spital Premiere, Ginecologie, Timișoara, România

Deep infiltrative endometriosis is a chronic disease, hormonal dependent who advanced the symptoms can become debilitating painful by the involvement of infertility and pelvic organs, some vital target (rectum, ureters, bladder). Surgery of deep endometriosis is the most demanding of all types of gynecologic surgery, requiring specially trained surgeons and gynecologists, who works closely with other surgeons (colorectal, urologists, neurosurgeons pelvic) organized in multidisciplinary teams and operating in dedicated facilities. EndoInstitute Timișoara is one such feature, our experience counting over 750 cases evaluated over 220 interventions, 100 of rectal resections operated. From all cases 77% were advanced cases, stage 3 and 4. In such a complex surgery, the complications are inherent. Immediate frequent severe complications include: intestinal fistula, ureteral fistula, pelvic abscess, recurrent vaginal and ureteric fistula. Severe tardive complications are: vesicle atonia, lower limb motor deficits, loss of ovarian reserve, low anterior rectal resection syndrome (LARS). In our study of patients severe immediate complication rate (Klavien 3 and 4) is 1.5% (2 recto-vaginal a bladder wound uroperitoneum), severe late complications rate is 4% (4 LARS syndrome, a Bladder denervation, 2 transient vesicular atons, an external popliteal sciatic nerve palsy). Complications of severe endometriosis surgery ditch possibly, probably real and should be discussed with the patient before surgery, preoperative lesion balance being capital in guiding discussion with the patient and determining appropriate surgical strategy.

OC-52

FUNDOPLICATURĂ ENDOSCOPICĂ CU NOUL DISPOZITIV “ESOPHYX Z®” PENTRU BRGE RECIDIVATĂ LA 7 ANI DUPĂ FUNDOPLICATURĂ CU “ESOPHYX 2®”. PREMIERĂ MONDIALĂ**WORLD’S FIRST TRANSORAL INCISIONLESS FUNDOPLICATION WITH “ESOPHYX Z®” FOR RECURRENT GERD, 7 YEARS AFTER TIF WITH “ESOPHYX 2®”**A. Nicolau¹, A. Lobonțiu²¹Spitalul Clinic de Urgență, București, România²EndoGastric Solutions, Redmond, WA, SUA

Transoral Incisionless Fundoplication (TIF) with EsophyX device for a well selected GERD patient population has proven its efficiency, safety and durability. We present a case report of a male, 63 years old, with typical and atypical GERD symptoms started 15 years ago. The esophagogastroduodenoscopy (EGD) showed a Hiatal Hernia of 3 cm and an erosive esophagitis Los Angeles Grade B. The first surgery was performed 7 years ago: a TIF with the EsophyX 2 device (EndoGastric Solution, Inc., Redmond, WA, United States). Post-surgery symptoms were controlled, completely eliminated, the EGD showing the healing of the esophagitis. Six years after the surgery the sore throat re-appears, while the EGD shows a 2 cm hiatal hernia and erosive esophagitis Los Angeles Grade A. The Impedance pH-metry confirms GERD with a DeMeester score of 44.5. In 2016 (7 years after first procedure) a second TIF 2.0 procedure, this time with EsophyX Z device is performed. The EsophyX Z device is an automatic stapler-like fastener delivery system, easier of use, faster, safer and more reproducible (standardized fastener delivery). The time of the procedure was significantly reduced, compared to first procedure. The patient is now symptom free, EGD is normal, pH significantly improved at one year after reoperation. This is a World’s first case report of a TIF 2.0 procedure with EsophyX Z device 7 years after a first TIF procedure with EsophyX 2 device. We present the video with both surgeries performed.

OC-53

ABORDAREA LAPAROSCOPICĂ A URGENTELOR GINECOLOGICE - EXPERIENȚA UNUI DEPARTAMENT DE CHIRURGIE GENERALĂ**LAPAROSCOPIC APPROACH OF GYNECOLOGICAL EMERGENCIES - EXPERIENCE OF A GENERAL SURGERY DEPARTMENT**I. S. Coman¹, Elena-Violeta Coman², C. G. Florea¹, Oana Ilona David¹, V. A. Porojan¹, V. T. Grigorean²¹Spitalul Clinic de Urgență „Bagdasar-Arseni”, Chirurgie Generală, București, România²Spitalul Clinic de Urgență „Bagdasar-Arseni”, Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Chirurgie Generală, București, România

Study Objectives: we analyze the emergency gynecological cases, that benefit from definitive or stage treatment in the surgery department of „Bagdasar-Arseni” Clinical Emergency Hospital.

Means and Methods: this study has the purpose to analyze retrospectively the cases with acute gynecological sufferences (bleeding uterine tumors, complicated ovarian and salpingian pathology, pelvic abscesses of genital origin etc.), who adressed or have been brought in emergency conditions to the General Surgery Department of „Bagdasar-Arseni” Clinical Emergency Hospital over the last 7 years (263 cases). It is performed an analysis of the diagnostic methods, the time spent from the admittance to the surgical procedure, the medical and surgical procedures used to resolve these cases, as well the palliative procedures performed.

Results: the gynecological cases were resolved through laparoscopic approach (174 cases), but also through classic approach (69 cases), and 20 cases were converted from laparoscopic to classic surgery. The used surgical procedures depended on the type of disease, the age, the clinical background and were guided by principles of oncology, postoperative safety or hormonal and reproductive functions.

Conclusions: the emergency gynecological pathology represents a significant percentage of our emergency department’s activity, the chosen treatment being the definitive solution or representing a stage of the treatment of complex cases.

Key words: laparoscopy, emergency, ovary, uterus, salpinx.

OC-54

ABORD COMBINAT ANTERIOR ȘI LATERAL PENTRU UN CONTROL MAI BUN VASCULAR ÎN SPLENECTOMIA LAPAROSCOPICĂ

COMBINED ANTERIOR AND LATERAL APPROACH FOR BETTER VASCULAR CONTROL IN LAPAROSCOPIC SPLENECTOMY

M. Matei¹, M. Beuran², C. Ș. Turculeț¹, F. M. Iordache¹, I. Olteanu¹, Tania Bianca Ilie¹, Alina Prodan¹

¹Spitalul Clinic de Urgență, Secția Chirurgie I, București, România

²Spitalul Clinic de Urgență, Secția Chirurgie III, București, România

Background: Vascular control and primary interruption of the arterial supply of the spleen are key factors for a successful laparoscopic splenectomy. Given the great variability of the spleen anatomy regarding the patterns of splenic blood supply and the relationship of the splenic hilum to the tail of the pancreas, we focused on beginning the operation with a set-up that would keep our options open and allow us to adapt the operative strategy to each patient. For this reason we use a combined anterior and lateral approach to make the best use of the known benefits of both approaches and get a better display of the anatomy.

Methods: Patient positioning: - modified right lateral semi-recumbent position; - rotation of the table to obtain the best operative angle - right / left table tilt will allow us to put gravity to work as the spleen naturally falls toward the left lobe of the liver; - suitable port placement in order to offer decent ergonomics but also optimize working angles between instruments - we use 4 trocars evenly spaced around the costal margin to allow maximum flexibility for the interchange of the camera (30-degree) and other instruments.

Results: This set-up offered us an optimal exposure of both sides of the splenic hilum, safe conditions to identify, individual dissect and divide the splenic vessels.

Conclusions: In conclusion, a combined anterior and lateral approach offers in our opinion the best conditions for a flexible surgical strategy adjustable to the specific anatomy of each patient.

OC-55

ANALIZA COSTULUI CONSUMABILELOR PENTRU APENDICECTOMIA LAPAROSCOPICĂ

ANALYSIS OF THE COST OF CONSUMABLES USED DURING LAPAROSCOPIC APPENDECTOMY

P. V. H. Boțianu

Spitalul Clinic Județean Mureș, Târgu Mureș, România

Objective: We have analysed the cost of the consumables required to perform laparoscopic appendectomy, since this is one of the main arguments against the laparoscopic approach for appendicular diseases.

Material and Method: We have divided the surgical procedure in the following operative steps: gaining access to the peritoneal cavity, sectioning of the mesoappendix, sectioning of the appendix + treatment of the appendicular stump and specimen extraction. Based on personal experience and data from the available literature we have identified various technical variants for each operative step and calculated the costs of the associated consumables.

Results: Both for each separate operative step and overall we have identified a significant variation, with overall costs ranging between 10 and over 1500 Euro depending of the chosen operative technique. We found no major advantage of a certain technical variant in order to justify the high variability of the costs.

Conclusions: In the economical evaluation of the laparoscopic appendectomy the cost of the consumables must be very carefully analysed; choosing a specific technical variant may have a major impact on the hospitals budget. For countries with low/middle income (including Romania), the minimal shortening of the operative time does not justify the routine use of endoGIA staplers or of sophisticated single-use hemostasis/vascular sealing devices.

OC-56**TRATAMENTUL LAPAROSCOPIC AL CANCERULUI DE COLON****LAPAROSCOPIC TREATMENT OF COLON CANCER**

M. Bica¹, A. Nicolaescu¹, Georgiana Graure¹, Adriana Tudorache¹, Mihaela Olteanu², I. Georgescu¹, V. Șurlin¹

¹Universitatea de Medicină și Farmacie, Clinica Chirurgie I, Craiova, România

²Universitatea de Medicină și Farmacie „Victor Babeș”, Clinica Chirurgie I, Craiova, România

Introduction: Laparoscopic surgery is being used more and more often in colon cancer treatment. Favorable postoperative results it is the reason minimally invasive approach tends to become the standard treatment for colon cancer.

Material and Method: Retrospective study of 265 colon cancer patients admitted over 6 years (2011-2016).

Results: 85 cases of complicated colon cancer underwent emergency surgery. 180 cases of uncomplicated colon cancer underwent elective surgery. 28 cases had laparoscopic surgery (15,5% of elective surgery). There were 17 cases of right colon cancer (60,7%). Laparoscopic right colectomy was performed with extracorporeal manual ileo-colic anastomosis. 11 cases (39,3%) had left colon cancer. We performed 4 laparoscopic sigmoidectomies and 7 laparoscopic left colectomies. There were 4 intracorporeal mechanical anastomosis and 7 extracorporeal manual anastomosis. There was a low morbidity rate (5 wound infections and 2 anastomotic leaks - treated conservatively). Mortality rate was 0. Medium hospital stay was 5,4 days.

Conclusion: Laparoscopic surgery for colon cancer is associated to a fast recovery and a low morbidity and mortality rate. This makes it a viable alternative for colon cancer surgical treatment.

OC-57**REZECTIA ANTERIOARĂ DE RECT PE CALE LAPAROSCOPICĂ - EXPERIENȚA PERSONALĂ****LAPAROSCOPIC ANTERIOR RESECTION - PERSONAL EXPERIENCE**

R. C. Popescu, Cristina Dan, A. Dosa, A. C. Ghioldiș, R. D. Boșneagu

Spitalul Clinic Județean de Urgență „Sf. Apostol Andrei”, Clinica Chirurgie I, Constanța, România

Objective: Laparoscopic surgery for rectal cancer is proven to result in faster recovery, fewer complications with equal oncologic result.

Material and Methods: We present our personal experience in the last two years regarding laparoscopic anterior resection, analyzing technical intraoperative difficulties and postoperative complications. It was used a 5-port technique with vascular approach first, followed by mobilization of splenic flexure and TME. A colorectal or coloanal anastomosis was performed using a double stapling technique and end-to-end anastomosis. Protective loop ileostomy was routinely performed for middle and low rectal tumors.

Results: Intraoperative hemorrhage was controlled by titan clips on vascular branches or plasma Argon into pelvic floor. A case of peritonitis due to anastomotic leakage was managed laparoscopically preserving the primar anastomosis.

Conclusion: Laparoscopic anterior resection for rectal cancer is challenging for surgeons with the lowering level of anastomosis and increasing demands for anal sphincter preservation.

OC-58**CONTRIBUȚIA LA DIGNOSTIC - CEA MAI BUNĂ DOVADĂ PENTRU APENDICECTOMIA LAPAROSCOPICĂ CA ȘI „GOLD STANDARD”****DIAGNOSIS CONTRIBUTION - THE BEST ADVOCATE FOR LAPAROSCOPIC APPENDECTOMY AS A GOLD STANDARD**

R. Mehic, Vasilica Marcu, Rita Anghel, Veronica Indreica, G. Jinescu, M. Bolocan, M. Beuran

Spitalul Clinic de Urgență, Clinica Chirurgie Generală, București, România

Introduction: Appendectomy remains one of the most frequent intervention in surgical emergency clinics (10%). Although

the percent of laparoscopic appendectomies (LA) increased, there are still controversies on the question if we must consider or not the gold standard.

Methods: We made a retrospective study looking for the appendectomies performed in our department in the last 10 years. We noticed the difference between admittances and postoperative diagnosis, the delay in diagnosis, the contribution of laparoscopy to correct the diagnosis and therapeutic attitude.

Results: The number of LA increased from 0,9% to 20%. We noticed the preference in certain categories of patients as premenopausal female, obese, elderly, or immunocompromised patients. Uncertain diagnosis and diffuse peritonitis (with unknown starting point) are other 2 indications for LA. 12% of so called acute appendicitis were proved to be another disease (Salpingitis, Perforated ulcer, Diverticulitis, Omentum necrosis, Peritoneal adhesions) some of them requiring different attitude. Another interesting situation we found is the reactive appendicitis associated with genital inflammations, diverticulitis, or what we call "bipolar acute abdominal syndrome" in association with cholecystitis, bowel obstruction, colon neoplasia.

Conclusions: Beyond the already proven superiority of laparoscopy in shorter hospitalization, lower surgical-site infections, earlier return to work, better cosmetic results, we must reconsider its role in diagnosis of real presence of appendicitis, of association with another acute intraabdominal disease or of abnormal position of caecum or appendix. In some cases it could avoid an unnecessary appendectomy or laparotomy. All these are strong motivations to reconsider LA as gold standard.

OC-59

APENDICECTOMIA LAPAROSCOPICĂ ÎN SARCINĂ - EXISTĂ RISCURI PENTRU FĂȚ?

LAPAROSCOPIC APPENDECTOMY IN PREGNANCY - WHAT ARE THE RISKS FOR THE FETUS?

Andreea Cordoș, M. Mureșan, V. Bințișan

Spitalul Clinic Județean de Urgență, Clinica Chirurgie I, Cluj-Napoca, România

In the past laparoscopic approach was considered to be contraindicated to pregnant women with acute appendicitis. Iatrogenic uterine injuries, placental hypoperfusion and fetal acidosis secondary to CO₂ pneumoperitoneum was believed to reduced fetal outcomes and produced preterm births. Since surgeons earned more experience with laparoscopic techniques, numerous series reported contradictory data, favoring laparoscopic approach for treatment of acute appendicitis in every trimester of pregnancy. Current guidelines states that laparoscopic appendectomy may be performed safely in pregnant patients without compromising the safety of the fetus when it is performed by experienced laparoscopic surgeon. We report 2 cases of successfully laparoscopic appendectomy performed in the second trimester of pregnancy for acute appendicitis. A review of the literature comparing laparoscopic and open approach of acute appendectomy in pregnancy is also presented.

OC-60

ABORDAREA LAPAROSCOPICĂ A DIVERTICOLULUI MECKEL

LAPAROSCOPIC APPROACH IN MECKEL DIVERTICULUM

E. Georgescu¹, Suzana Mucenic¹, S. Pătrașcu¹, S. Ramboiu¹, Milena Georgescu², M. Bica¹, S. Bordu¹, A. Gogănu¹, I. Georgescu¹, V. Șurlin¹

¹*Spitalul Clinic Județean de Urgență, Chirurgie I, Craiova, România*

²*Spitalul Clinic Județean de Urgență, Chirurgie Plastică, Craiova, România*

Objective: To present 4 cases of Meckel diverticula incidentally discovered during routine laparoscopy for other digestive pathology.

Material and Methods: Between 2012-2017 we treated 4 cases of Meckel diverticulum, with a male/female ratio of 4/1, aged between 28-64 years old, with an average of 45 years. The circumstances of diagnosis: all patients presented specific signs

of peritoneal irritation, with 3 out of 4 patients showing pain in the right iliac fossa with local guarding, nausea and vomiting; blood tests - moderate leukocytosis, without other alterations; imaging tests were not conclusive for diagnosis. Laparoscopic approach allowed for a positive diagnosis and treatment. Three cases were associated with different stages of acute appendicitis, and one case was associated with acute gangrenous pycholecystitis. Treatment consisted of laparoscopic diverticulectomy with endoGIA in 3 cases, and open cuneiform enterectomy after conversion in one case.

Results: The surgical procedures were uneventful, with no intra or postoperative complications; procedure time varied between 14 and 35 minutes, and mean hospital stay was 6 days.

Conclusions: Diagnosis for Meckel diverticulum was established entirely intraoperatively, as laparoscopy provided an advantage in surgical exploration. Laparoscopic diverticulectomy is both feasible and safe for patients.

OC-61

ABORDUL ENDOSCOPIC RETROMUSCULAR ÎN REZOLVAREA EVENTRAȚIEI PARASTOMALE PRIN PROCEDURĂ SUGARBAKER

ENDOSCOPIC RETROMUSCULAR APPROACH IN PARASTOMAL HERNIA REPAIR - SUGARBAKER TECHNIQUE

V. G. Radu¹, M. Lică¹, Adriana Radu²

¹Life Memorial Hospital, Chirurgie, București, România

²Life Memorial Hospital, Chirurgie plastică, București, România

The parastomal hernia is a real challenge in abdominal wall reconstruction. The modification of the architecture of the abdominal wall due to the hernia combined with the ostomy defines the parastomal hernia as a particular entity. Even though there are many procedures for parastomal hernia repair, we think that the Sugarbaker technique solves the best the mechanical and functional tasks in abdominal wall reconstruction: parietalisation of the ostomy, closure of the defect and mesh augmentation. After improvement of our technique in endoscopic retro-muscular approach in ventral hernia repair, we performed successfully the parastomal hernia repair - Sugarbaker principle by endoscopic retro-muscular approach. In this way we have added two advantages: advantages of MIS and place the mesh outside of the abdominal cavity. In this video we present a case with incisional recurrent hernia and parastomal hernia repaired by endoscopic retro muscular approach, Sugarbaker technique.

OC-62

ABORDUL LAPAROSCOPIC ÎN TRATAMENTUL OCLUZIEI INTESTINALE PRIN FIBROM ILEAL OBSTRUCTIV

OBSTRUCTIVE FIBROID TUMOR OF THE ILEUM SUCCESSFULLY TREATED BY LAPAROSCOPIC APPROACH

Andreea Cordoș, I. Cetină, V. Bințișan

Spitalul Clinic Județean de Urgență, Clinica Chirurgie I, Cluj-Napoca, România

Fibroid tumor of small bowel is a rare inflammatory benign tumor with unknown etiology, which develops in the submucosa of gastrointestinal tract. It usually remains clinically silent, being incidentally detected on surgery for other diseases, but occasionally it may become symptomatic when it is complicated by intussusception. We report the case of a 37 years old lady with a history of intermittent abdominal pain who was admitted to Emergency Department for abdominal pain, nausea and inability to eliminate flatus. CT scan of the abdomen showed bowel obstruction with intussusception of ileum. Exploratory laparoscopy confirmed the intussusception of terminal ileum produced by a 2 cm large ileum tumor. Laparoscopic enterectomy was successfully performed with side to side intracorporeally stapled anastomosis. The post-operative course was uneventful. Patient was discharged in the fourth postoperative day. Final histopathologic report revealed an inflammatory fibroid tumor of ileum. This is the first case in literature of obstructive fibroid tumor of the ileum successfully treated by laparoscopic approach.

OC-63

EXPRESIA ARNM ADIPONECTINĂ ÎN PROFILUL MOLECULAR AL PACIENȚILOR CU OBEZITATE MORBIDĂ**ARNM ADIPONECTIN EXPRESSION IN THE MOLECULAR PROFILE OF MORBIDLY OBESE PATIENTS**G. Verdeș¹, C. Duță¹, Roxana Popescu², M. Mitulețu², S. Ursoniu³, F. Lazăr¹¹Spitalul Clinic Județean de Urgență "Pius Brînzeu" Timișoara, Clinica 2 Chirurgie, Timișoara, România²Universitatea de Medicină și Farmacie "Victor Babeș", Biologie Celulară și Moleculară, Timișoara, România³Universitatea de Medicină și Farmacie "Victor Babeș", Biostatistică Medicală, Timișoara, România

Excess weight represents a priority medical problem of the last fifty years. World Health Organization (WHO) appreciates that globally there are more than 1 billion adults being overweight out of which 300 million are obese and that child morbidity is 10%. Furthermore, obesity has a tendency to reach epidemic proportions globally. The Romanian Association for the Study of Obesity reports a prevalence of obesity of 21.3% for the year 2016, considered to be the lowest at European level. The aim of our study was to assess mRNA levels in visceral adipose tissue and to correlate them with clinical-biological parameters in morbidly obese patients. 38 morbidly obese patients were selected and 8 cases of non obese subjects. The expression levels of adiponectin mRNA were determined through RT-PCR. Also we assessed biochemical parameters like serum glucose level, total cholesterol and triglycerides. The expression levels of adiponectin mRNA were correlated with demographic parameters (age, sex, BMI) and with clinical parameters (HTA, hypothyroidism and type 2 diabetes). This study showed significant correlations between adiponectin mRNA levels with obesity, age, triglycerids, total cholesterol and hypothyroidism. In conclusion, the expression level of adiponectin could be used as a molecular marker in the management of obesity.

OC-64

OBEZITATEA ȘI INTOLERANȚA GENETICĂ LA LACTOZĂ LA ADULȚI**OBESITY AND GENETIC INTOLERANCE TO LACTOSE IN ADULTS**

Ruxandra Pleșea

Ponderas Academic Hospital, Bucharest, Romania

The causes of obesity and metabolic syndrome are intensively researched in order to better understand how to reverse the global morbidity related to this cause. Lactose is the major carbohydrate component of milk and other dairy products. Digestion of lactose is mediated by lactase (LCT), an enzyme expressed in epithelial cells of the small intestine. The -13910C>T polymorphism (rs4988235) from the lactase (LCT) gene, strongly associated with lactase persistence (LP) is emerging as a new candidate for obesity. The association of the LCT-13910 C>T POLYMORPHISM (C/C, C/T AND T/T) with obesity and metabolic syndrome is widely discussed. The LP allele has not been found anywhere before 5,000 BP then the mutation started to rise, and it can be found today in 45-65% in the general population (lactase non-persistent individuals) individuals cannot extract large amounts of glucose from any dairy products. The relation of the lactase persistency (LP) with obesity and metabolic syndrome differs in studies depending on the population. In Ponderas Academic Hospital we have performed a search over 56 obese patients in order to see the relation between obesity and the genetic variants of the lactase gene polymorphism. 56 overweight and obese patients were enrolled and tested for the LCT gene (MCM6) genotype. 33 patients are CC genotype (LNP) representing 60% of the total obese patients. 17 patients are C/T genotype (LP) representing 30% of the total obese patients. 5 patients are T/T genotype (LP) representing 10% of the total obese patients. Further research is needed in order to establish the effects of the dietary approach fitted to each person's genotype and the possibility to better manage weight through a nutrigenetic approach.

OC-65

NIVELUL MATRICEI DE METALLOPROTEINASE - O CALE SPRE FIZIOPATOLOGIA OBEZITĂȚII?**MATRIX METALLOPROTEINASE LEVEL - A PATHWAY TO THE PATHOPHYSIOLOGY OF OBESITY?**

R. Mirică¹, M. Ionescu¹, Alexandra Mirică², O. Ginghină¹, R. Iosifescu¹, N. Iordache¹, L. Zăgorean³

¹Spitalul Clinic de Urgență "Sf. Ioan", Chirurgie generală, București, România

²Institutul Național de Endocrinologie "C. I. Parhon", Endocrine, București, România

³Universitatea de Medicină și Farmacie "Carol Davila", Fiziologie II și Neuroștiințe, București, România

Introduction: Matrix metalloproteinases (MMPs) are known enzymes involved in the modulation of extracellular matrix (ECM) and adipocyte and preadipocytes differentiation. Obesity implies a more or less rapid but generalized increase in adipose tissue (adipocyte and preadipocytes), and this processes generate abnormal ECM metabolism.

Aim: This paper proposes a thorough study of literature with focus on the important roles of matrix metalloproteinases in the pathophysiology of obesity and the result of a pilot study

Materials and Methods: The experimental study used 20 obese wistar rats (10 in control group and 10 in Study group). The study group had gastric by-pass for obesity, and there were analysed the pre and post operative MMP-2 and MMP-9. The review is based a thorough study of literature with focus on the important roles of matrix metalloproteinases (MMPs) in the pathophysiology of obesity

Results: The MMP-2 and MMP-9 activities were detectable, but MMP-2 activity was significantly higher than MMP-9. MMP-9 was strongly correlated with body weight parameters before surgery, as well as after significant body weight reduction as a result of bariatric surgery. Concerning MMP-2 and MMP-9 they are also involved in the turnover of basement membranes both those of adipose tissue and endothelial. MMP-9 levels were moderately correlated with HDL cholesterol levels.

Conclusions: MMP-2 and MMP-9 are the two most important proteins of ECM involved in adipose tissue remodeling after bariatric surgery. It is then tempting to speculate that the adipocyte-derived MMPs might represent a new target for the inhibition of adipose tissue growth by inhibiting adipose differentiation, but it requires more thorough studies to support this.

OC-66

„CREDOR” - UN STUDIU RANDOMIZAT PENTRU EVALUAREA EFICIENȚEI CHIRURGIEI METABOLICE VERSUS TRATAMENT CONSERVATOR LA PACIENȚII CU UN CONTROL SLAB AL T2DM - REZULTATE LA 2 ANI**“CREDOR” - AN RTC FOR THE EFFICIENCY OF METABOLIC SURGERY VERSUS CONSERVATIVE TREATMENT IN PATIENTS WITH POOR CONTROL OF T2DM - 2 YEARS RESULTS**

B. Smeu¹, C. I. Tirgoviste², C. Guja², Gabriela Tanko³, Daniela Lixandru⁴, C. Copaescu¹

¹Ponderas Academic Hospital, Bucharest, Romania

²Institute of Diabetes, Nutrition and Metabolic Diseases “Prof. Dr N. Paulescu”, Bucharest, Romania

³Institute of Cellular Biology and Pathology “Nicolae Simionescu” of the Romanian Academy, Bucharest, Romania

⁴“Carol Davila” University of Medicine and Pharmacy - Bucharest

Background: The T2DM remission after metabolic surgery opens new pathways for basic research for better understanding its pathogenesis and provides a hope for reducing the long term medical expenses for these patients.

Aim: to develop a selection protocol for T2DM patients with obesity eligible for metabolic surgery (laparoscopic sleeve gastrectomy), after comparing the treatment efficacy with the current standard treatment of T2DM.

Methods: C.R.E.D.O.R. (Collaborative Romanian Efforts for Diabetes and Obesity Retrench) is a prospective randomized trial control with 38 patients in two groups. The surgical group (19 patients) underwent laparoscopic sleeve gastrectomy in a Center of Excellence in Bariatric and Metabolic Surgery (Ponderas Academic Hospital) by one surgical team and the conservative group was treated by one medical team from “Prof. N. Paulescu” National Institute for Diabetes, Nutrition and Metabolic Diseases, according to up to date clinical guides for diabetes mellitus.

Results: The surgical group obtained, as expected, the most statistically significant results after one year, in BMI (39.96 to 28.7kg/m², p<0.000001), the abdominal circumference (134 to 102 cm, p<0.0001421), glycaemia (197.68 to 96.33mg/dl,

$p < 0.000001$), HbA1c (8.4 to 5.9%, $p < 0.0001426$), HDL (34.2 to 50.7mg/dl, $p < 0.000001$), TGL (178.23 to 86.26mg/dl, $p < 0.000001$), and almost all metabolic and oxidative stress parameters. Only 2 patients from the surgical group are on diabetic medication one year after surgery (2/19) with reduced doses, compared with all 19 from the medical group (19/19). **Conclusions:** Sleeve gastrectomy proves to be one of the most effective metabolic procedure available, with statistically significant results on T2DM patients with obesity.

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OC-67

RECUPERARE SUPERIOARĂ DUPĂ CHIRURGIE BARIATRICĂ ȘI ANESTEZIE CU DOZE SCĂZUTE DE OPIOIZI. PROTOCOLUL UNUI CENTRU DE CHIRURGIE BARIATRICĂ CU VOLUM MARE DE PACIENȚI

ENHANCED RECOVERY AFTER BARIATRIC SURGERY AND LOW OPIOID ANAESTHESIA. PROTOCOL IN A HIGH VOLUME CENTRE FOR BARIATRIC SURGERY

D. Godoroja^{1,2}, R. Badescu¹, A. Ene¹, A. Fodor¹, C. Copăescu¹

¹Department of Anaesthesia and Intensive Care, Ponderas Academic Hospital, Bucharest Romania

²University of Medicine and Pharmacy “Carol Davila” Bucharest Romania

Background and Aim: the Enhanced Recovery After Surgery (ERAS) concept was introduced as a multimodal recovery programme for elective bowel surgery. The authors demonstrated that by limiting pain, promoting gut function and early mobilisation, length of hospital stay was significantly reduced. Patients needed to be able to walk to the toilet, eat and hydrate themselves and be pain free. Although there are a limited number of ERAS studies in bariatric surgery, the ERAS Society published this year an evidence-based consensus regarding multimodal perioperative care pathway for patients undergoing bariatric surgery. Main elements of ERAS have three components -preoperative, intra and post-operative: the anaesthetic elements are to use short acting anaesthetic agents and non-opioid multimodal analgesia, avoiding hypoxemia, and early mobilisation. In morbidly obese patients, anesthesiologists are recommended to use an obstructive sleep apnoea safe anesthetic technique (minimizing opioids). The primary goal of the study was to assess the efficacy of using a low opioid protocol for general anesthesia in bariatric surgery.

Method: After local ethics committee approval, in February 2016 we introduced a protocol of low opioid general anesthesia for obese patients undergoing laparoscopic bariatric operations (sleeve gastrectomy and gastric bypass). The protocol was used by all anesthetists and was based on using low dose of fentanyl (100 mcg), adjuvants (ketamine, magnesium sulphate, lidocaine) and opioid free analgesics (Table 1). No intravenous morphine was administered at the end of the procedure. All patients received a protocolized opioid free multimodal postoperative analgesia and intravenous morphine only if the visual analogue score (VAS) was higher than 5. Cumulative opioid (iv mg morphine) consumption for 24 hours and pain severity scores (VAS) at rest and movement (cough) were recorded at 1, 4, 12, and 24 h postoperatively. Postoperatively all patients were in sitting position and used CPAP or deep breathing and incentive spirometry, Thrombo-prophylaxis and early mobilisation were provided together with monitoring oxygenation and hypoxemia avoidance.

Table 1. Protocol of low opioid anesthesia

Induction			Maintenance	
Magnesium sulphate	40mg/kg LBW	iv 15 min prior		
induction	Sevoflurane	1-1,5 MAC		
Lidocaine	1,5 mg/kg LBW	iv 15 min prior induction	Lidocaine	1mg/kg/h
Diclophenac	150 mg	iv 15 min prior		
induction	Magnesium sulphate	10mg/kg LBW/h		
Dexamethasone	8 mg	iv	Betaloc	1-5 mg iv/ if needed
Ketamine	20mg	iv		
Fentanyl	100 mcg	iv	15 min before Extubation	
Propofol	2,5-3 mg/kg LBW	iv	Paracetamol	2g iv
Muscular relaxant Rocuronium			Nefopam	20 mg iv
			Tramadol	100 mg iv

Results: Between February 2016 and August 2017 in Ponderas Academic Hospital, 1227 patients were operated on for bariatric procedures. The descriptive statistical data showed that 70,18% were women and 29,82% men with a mean age of 40.63 (± 12.03 SD) and the median BMI(kg/sqm) of 39,7(IQR-9,30). 247(20,13%) patients presented moderate –severe obstructive sleep apnoea and received CPAP treatment. Out of 1227 patients only 361 (29,43 %) received intravenous morphine in the first 24 hours after operation at a VAS higher than 5. The median of cumulative consumption of morphine at 24 h (mg morphine) in the morphine group was 6.00 (IQR 2.00). The pain scores at rest and with movement during all measured intervals were significantly low.

Vas 1h - Mean (\pm SD) 3.70 (± 1.92)

Vas 4h - Mean (\pm SD) 2.60 (± 0.96)

Vas 12h - Mean (\pm SD) 1.50 (± 0.97)

Vas 24h - Mean (\pm SD) 1.20 (± 0.63)

Women were more susceptible to the pain with increased consumption of morphine. In the CPAP group of patients, the morphine used was statistic significantly lower ($p < 0.00001$). Only 14 % of the patients with moderate-severe OSA needed morphine comparing with 33 % of the patients without OSA.

Conclusion: The low opioid anesthesia protocol in bariatric patients proved to be safe and feasible.

OC-68

REZULTATELE PE TERMEN MEDIU DUPĂ SLEEVE GASTRIC PRIMAR ÎNTR-UN CENTRU BARIATRIC NOU ÎNFIINȚAT MEDIUM TERM OUTCOMES OF PRIMARY LSG PERFORMED IN A NEW BARIATRIC CENTER

C. E. Boru, V. Constantinică, Ana Pușcașu, R. Poenaru, N. Copca

Spitalul Clinic „Sfânta Maria”, Secția Chirurgie Generală și Transplant, București, România

Background: Laparoscopic sleeve gastrectomy (LSG) is the most performed bariatric procedure worldwide. The aim of this study was to evaluate the outcomes of primary LSGs performed in a recently established, public center for minimally invasive treatment of morbid obesity.

Methods: A retrospective, observational study was conducted in the Department of General Surgery and Transplant, Clinical Hospital “Sf. Maria” Bucharest. Demographics, operative time, intra and postoperative complications, incidence of gastroesophageal reflux disease (GERD) were reviewed, while postoperative outcomes were analyzed prospectively. Redo sleeves from other bariatric procedures were excluded.

Results: Between Jan 2014 and Dec 2016, 145 obese patients (M=43, F=102) were operated by primary LSG. Mean BMI at LSG was 43 ± 11.6 kg/m², 34 ± 5.6 kg/m² and 32.1 ± 4.5 kg/m² after 12 and, respectively 24 months postoperatively, with a mean follow-up of 23.5 months. Mean operative time of LSG was 75 ± 22 minutes, with a mean hospital stay of 3 ± 2.7 days. Intraoperative complications like bleeding, misfire occurred in 8 patients (5,5%) while postoperative complications like bleeding, leak, mediogastric stenosis occurred in 14 patients (10%). Overall satisfaction for postoperative evolution, comorbidities resolution and weight loss was obtained in 86% of the cases.

Conclusions: LSG is safe and effective on medium-term as concern weight loss and comorbidities remission. Long-term follow-up is mandatory to confirm data on weight loss durability, postoperative GERD and co-morbidities control.

OC-69

REZULTATE LA 2 ANI DUPĂ PROCEDEUL NARBONA-ARNAU ÎN TRATAMENTUL BOLII DE REFLUX GASTROESOFAGIAN DUPĂ GASTRECTOMIE LONGITUDINALĂ LAPAROSCOPICĂ - UN STUDIU PROSPECTIV

2 YEARS RESULTS OF NARBONA-ARNAU PROCEDURE TO CONTROL THE GERD AFTER LSG - A PROSPECTIVE STUDY

I. Hutopilă, C. Copăescu

Ponderas Academic Hospital, Bucharest, Romania

Background: Laparoscopic sleeve gastrectomy (LSG) is an effective bariatric procedure, increasingly performed during the last years. Up to 50% of obese patients before surgery have gastroesophageal reflux disease (GERD) and hiatal hernia (HH).

After the LSG alone or associated with calibration of the esophageal hiatus, the GERD /HH control is acceptable. But, for some patients, the reflux symptoms worsen postoperatively due to development of a HH or due to the recurrence of the HH previously repaired within the same intervention with LSG. For these situations, when the conservative treatment fails, there are proposed surgical solutions such as Roux- en-Y gastric bypass, Cardiopexy with Teres ligament - Narbona Arnau technique or LINX procedure. Objective: is to establish a standardized laparoscopic technique for cardiopexy using the teres ligament (Narbona Arnau technique) and to analyze the outcomes of this procedure.

Methods: The study is done in a Bariatric and Metabolic Center of Excellence – Ponderas Academic Hospital, with an active database and prospective follow-up for all the patients, particularly for this study starting in 2014 and ongoing in the present. There are 28 patients in the study (4 – male; 24-female) and the selection criteria for them was to have LSG performed and Hiatal Hernia with symptomatic GERD (poorly controlled with continuous proton pump inhibitors treatment). Preoperative investigations were the blood tests, upper gastrointestinal endoscopy, radiological contrast study, pH - metry, computed tomography with oral contrast. For all 28 cases, GERD and HH were preoperatively documented.

Results: There were no incidents during surgery. Time of surgery was 45 min to 120 min. For 8 cases laparoscopic Narbona Arnau technique was performed concurrent with revisional surgery (5 - re-sleeve gastrectomy and 3 – redo to gastric curvature plication). The postoperative outcome was favorable with rapid tolerance for liquids, except 4 patients who developed an acute stenosis which was remitted in 48 to 96 hours (therapeutic attitude consisted of stopping the fluid intake, decompression of the stomach with a nasogastric tube, proton - pump inhibitors (PPI), anti-inflammatory medication). We did not experience postoperative hemorrhage, fistula or abscess. Postoperative follow- up period was 24 months and continues. In the postoperative course at 6 months, 1 year and 2 years the percentage of patients without GERD symptoms and the need for treatment with PPIs was 64,28 %, 82,14%, respectively 71,42%. At 2 years postoperatively, the upper GI endoscopy showed remission/ improvement of the degree of esophagitis for 20 patients. For the same period of follow-up, the Ph-metry highlighted a normal value of DeMeester score for 71% o patients (all the patients had preoperatively high De Meester scores). No objective signs of hiatal hernia recurrence at imagistic investigations and upper gastrointestinal endoscopy were encountered. After 2 years, only 1 case with laparoscopic Narbona Arnau and concurrent re-sleeve gastrectomy was with persistent symptomatology and continuous PPI treatment due to a stenosis on the middle third of the gastric tube. For this case the solution was conversion to laparoscopic Roux-en-Y bypass.

Conclusions: Complete preoperative evaluation is mandatory for choosing the optimal intervention. Laparoscopic cardiopexy with teres ligament - Narbona Arnau technique - after sleeve gastrectomy is feasible and safe. Proved to be a good option for the treatment of symptomatic GERD after LSG, but further studies with high-volume patients are necessary.

OC-70

CONVERSIA GASTRECTOMIEI LONGITUDINALE LA BYPASS GASTRIC PENTRU SCADERE PONDERALA REZULTATELE UNUI STUDIU PROSPECTIV

CONVERTING A SLEEVE GASTRECTOMY TO A GASTRIC BYPASS FOR WEIGHT LOSS - OUTCOMES OF A PROSPECTIVE STUDY

Maura Buza, C. Copaesuc

Bucharest, Romania

Background: Laparoscopic sleeve gastrectomy (LSG) was initially performed as a first step of biliopancreatic diversion (BPD-DS), latter widely accepted as a sole bariatric procedure and the number of LSGs is yearly increasing. The indications for redo surgery after sleeve are mainly weight loss failure, insufficient metabolic control or late complications. The potential re do options are to: gastric bypass (GBP), re-sleeve, band over sleeve, gastric-plication, BPD-DS or SADI. The best redo option after failed sleeve gastrectomy is still to be debate. Aim: to analyze the results of redo operations after sleeve gastrectomy in order to establish a protocol useful in choosing the best redo surgery after failed metabolic sleeve gastrectomy.

Methods: A prospective study, including all the patients receiving redo operations after sleeve gastrectomy in a Bariatric Center of Excellence was initiated in 2013. Indications for redo, type of surgeries and their metabolic outcomes were analysed. Evaluation using a CT scan with 3D reconstruction and 24 monitoring pH-metry was performed in all the cases. GBP after LSG for weight loss failure was considered an option only if no enlargement of the gastric tube was demonstrated. Results Between 2013 and 2016, 40 patients [31 women (77,5%) and 6 male patients (22,5%)] received redo

operations after sleeve gastrectomy. All surgeries were laparoscopically performed. The mean time after primary LSG was 4,8 years (1,3-8,5) and the mean age was 38,5 years. 68% received re-sleeve, 25% received gastric bypass, 5% great curvature plication and 3% SADI. Out of the 10 pts that received gastric bypass - 3 patients had gastro-esophageal reflux disease and in 7 cases the indication for redo was weight loss failure. Two years after redo GBP for failed LSG the medium BMI was 32.1kg, similar with patients receiving re-sleeve after LSG (30,8 kg/m²) with a EWL 59,8%.

Conclusions: Redo surgery for failed LSG is efficient. More studies are necessary to identify the best redo surgery after failed metabolic sleeve gastrectomy.

OC-71

CHIRURGIE REVIZIONALĂ DUPĂ PLICATURĂ GASTRICĂ

REVISIONAL SURGERY AFTER GASTRIC PLICATION

R. C. Popescu, Cristina Dan, R. D. Boşneagu, A. C. Ghioldiş, A. Dosa

Spitalul Clinic Judeţean de Urgenţă „Sf. Apostol Andrei”, Clinica Chirurgie I, Constanţa, România

Weight gain after bariatric surgery is a challenge in terms of surgical management.

Material and Method: We present a case of morbid obesity for which a gastric plication was performed four years ago without a metabolic result, with weight regain. After specific preoperative investigations laparoscopic longitudinal gastrectomy is performed, the authors analyzing the intraoperative technical difficulties.

Results: Simple, postoperative evolution without complications, with discharge at 3-rd p.o.day.

Conclusions: Bariatric revisional surgery is safe when is performed by experienced teams, after evaluation of the remnant stomach and all the feasible surgical procedures.

OC-72

REDO LAPAROSCOPIC GASTRIC BYPASS DUPA GASTRIC BYPASS

LAPAROSCOPIC GASTRIC BYPASS REDO AFTER GASTRIC BYPASS

D. Andrei, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Background: A review of the literature shows that about half of the patients gain some weight after two years from gastric bypass (GBP). Weight gain is 8% on average, after reaching the minimum point, within 5 years of surgery. Long term failure rate after RYGBP is considered to be between 20-35%. Gastric pouch dilatation is the most common cause of weight regain, but also inadequate length of the alimentary limb (AL) or the biliopancreatic limb (BPL) may be involved. There are surgical and endoscopic solutions for GBP revision.

Methods: We had 11 patients (p) who underwent laparoscopic GBP redo after GBP between 2013-2017, initially operated in our center or other hospitals (9p with previous RYGBP and 2p with previous loop GBP). Indications for GBP redo were weight regain (9p), no weight loss (1p) and bile reflux gastritis (1p). Mean BMI was: 40,58 kg/m² and weight regain was 29 kg on average. In the RYGBP group, pouch resizing was performed in 7p, gastroenteroanastomosis was redone in 6p, BPL elongation was performed in 8p, AL was shortened in 6p. In the loop GBP group, elongation of the afferent limb was performed in 1p and in one patient loop GBP was converted to RYGBP due to bile reflux gastritis, using the proximal part of the efferent limb to create the alimentary limb.

Results: Mean time of surgery was: 230 min (90-360). We had no mortality, fistula occurrence or conversions. Laborious adhesiolysis was performed in 3p. We had an early reintervention due to bowel occlusion (enteroenteroanastomosis twist) and two wound infections. EWL after 1 year was 62% on average.

Conclusions: Laparoscopic GBP redo after GBP is an important option when GBP fails and treatment must be adapted to each patient.

Key words: gastric bypass redo, laparoscopy

OC-73

ROLUL ICG ÎN CHIRURGIA METABOLICA

ROLE OF ICG IN METABOLIC SURGERY

B. Smeu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Background: leaks after bariatric surgery are one of the most serious postoperative complications and can occur in up to 5% of cases, increasing length of hospital stay, health care costs, morbidity and mortality. The known patient related risk factors are: congestive heart failure, age over 50 years, male sex and chronic lung disease. The intraoperative related risk factors are blood perfusion to the anastomotic tissue or stapled line, tension on the anastomosis, operative time, blood loss and number of stapler firings. Aim: to develop a protocol for using the ICG as a supplementary testing tool for leaks prevention after bariatric surgery.

Methods: Indocyanine green fluorescence arteriography (ICG-FA) uses a sterile, anionic, water-soluble, tricarbocyanine compound dye as an optical contrast agent. ICG absorbs NIR (near infra-red) light and emits a slightly longer wavelength which is then recorded with special equipment. The ICG is administrated IV by the anesthesiologist and is only present in viable, proper vascularized tissues, thus empowering the bariatric surgeon to make a good decision when there are doubts about anastomotic tissue or stapled line viability, or when you have a patient with major risk factors for fistula.

Results: after starting using ICG for bariatric surgery in the last year, we were able to improve two anastomoses with poor vascularization in patients with laparoscopic Roux-en-Y gastric bypass, decreasing the risk for a postoperative leak.

Conclusions: the intraoperative testing of tissue viability with ICG is a valuable tool for the surgeons performing bariatric surgery and its routine use should be implemented at least on patients with high risk for postoperative fistula.

OC-74

TROMBOZA PORTALĂ DUPĂ CHIRURGIA BARIATRICĂ - RISC ȘI MANAGEMENT

PORTAL THROMBOSIS AFTER BARIATRIC SURGERY - RISK AND MANAGEMENT

Diana Hainaroșie, Daniela Godoroja

Ponderas Academic Hospital, Bucharest, Romania

Background: Portal thrombosis (PT) has been described as a relatively rare complication after several laparoscopic bariatric procedures. Early diagnosis of PT may improve its severe outcome. We present our experience in managing PT after laparoscopic sleeve gastrectomy (LSG).

Method: All the cases presenting PT after LSG and treated in our Centre between January 2006 and September 2017 have been analyzed. Clinical signs, diagnostic work-up, therapeutic protocol and evolution are commented.

Results: LSG was performed on 6991 patients out of whom 11 developed portal thrombosis (11/6991). Added to them, one more patient was referred to us from another hospital. Our 11 patients were diagnosed within the first 24 hours after readmission, based on clinical findings, CT scan or surgery. They manifested nonspecific signs and symptoms: abdominal or back chest pain, nausea, vomiting, fever, diarrhea and stool blood. The treatment was only conservative in ten cases (consisting in full dose of unfractionated heparin and inhibitor of tissue plasminogen activator in one case) and laparoscopic surgery was associated in one patients. The outcome was favorable and long term oral anticoagulant therapy followed. In four patients genetic coagulation disorders were discovered. The case referred from another hospital was admitted in emergency with septic shock and general peritonitis. She underwent open surgery with bowel resection in association with supportive treatment of septic shock and multiple organ failure. Details about the evolution of this dramatic case will be presented in the paper.

Conclusions: Portal thrombosis after LSG is a rare, difficult to diagnose postoperative complication, with a potentially lethal outcome if diagnosis and treatment are delayed or not properly sustained. The bariatric team should be aware of the importance of early diagnosis and adequate treatment of PT to improve its outcome.

OC-75

CUM SCĂDEM RISCUL DE SÂNGERARE INTRAOPERATORIE DUPĂ GASTRECTOMIE LONGITUDINALĂ LAPAROSCOPICĂ - REZULTATELE UNUI STUDIU PROSPECTIV PE 6 ANI**REDUCING THE INTRAOPERATIVE BLEEDING RISK IN LSG - 6 YEARS RESULTS OF A PROSPECTIVE STUDY**

Bogdana Banescu, C. Copaescu

Ponderas Academic Hospital, Bucharest, Romania

Aim: to demonstrate the effectiveness of laparoscopic suture along the gastric staple line in laparoscopic sleeve gastrectomy in order to prevent bleeding

Methods: Our active protocol for controlling bleeding sources started in 2012 in Ponderas Academic Hospital. During the first period (between 2012 – 2014) hemostasis was provided by placing clips at the level of the gastric staple line. In the second period (from 2015 until present) hemostasis was provided by over sewing with a running suture the gastric staple line.

Results: Between 2012 and 2017 (six years study) LSG was performed in 4728 patients. During the first period (2012-2014) 2170 cases were submitted to LSG, hemostasis with clips being performed in all cases. However, among these cases nine patients required reoperation for early postoperative bleeding (0.41%). At the moment of reoperation bleeding from the staple line was encountered in five cases while in the rest four cases no bleeding source was identified. During the second period (2015 to present) 2558 patients were submitted to LSG. Among these cases reoperation for postoperative bleeding was needed in six cases (0.23%), but no bleeding from the staple line being encountered. These bleeding rates are significantly lower then before – 2002-2010 , 2610 pts, 29 bleedings, 1,1%, 24 from stapled line (0.91%).

Conclusions: Oversewing the stapled line after LSG significantly reduced the stapled line bleedings. Other causes of post-operative bleeding are reduced by the described intraoperative protocol.

OC-76

MARKERI AI COMPLICAȚIILOR DUPĂ GASTRECTOMIE LONGITUDINALĂ LAPAROSCOPICĂ**MARKERS OF COMPLICATIONS AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY**R. R. Scurtu¹, S. Ionescu², R. Drasovean¹, R. Motocu², C. Ciuce¹¹*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Clinica Chirurgie 1, Cluj-Napoca, România*²*Spital Clinic Județean de Urgență, Clinica Chirurgie 1, Cluj-Napoca, România*

Aim: Postoperative complications after laparoscopic gastric sleeve for obesity are mainly represented by gastric fistula and bleeding. When present, these complications significantly influence the postoperative course, including the patients' vital prognosis. This study aimed to identify laboratory markers that will allow rapid diagnosis of complications after laparoscopic gastric sleeve.

Material and Method: We included in this study 234 patients with laparoscopic gastric sleeve. There were 142 men and 92 women, with a mean age of 38.6 years (21-62) and a mean body mass index of 39.1 (32.1-65.4). Of these patients 42% had an associated diabetes. The surgical technique was practically the same, excepting 86 patients in whom the stapled line was oversewed.

Results: We recorded 3 gastric fistula (2 of type 1 and one type 3) with an incidence of 1.28% and 2 bleedings from the stapled line requiring surgical hemostasis (0.854%). One patient developed both complications. The diagnostic was suggested by the alteration of the general condition in 4 patients, while the fifth one presented with a gastric content secretion through the ancient drain tube scar, two months after the operation. All patients with gastric leak had fever 24 hours prior the diagnosis. Patients with precocious postoperative complications had significantly high values of the C reactive protein (CPR) and lactic dehydrogenases (LDH) 48 hours before the complication was diagnosed.

Conclusions: After gastric sleeve, in patients with altered general condition, the PCR and LDH values might be useful for a quicker diagnose of postoperative severe complications.

OC-77

CONVERSIA GASTRECTOMIEI LONGITUDINALE LA BYPASS GASTRIC ȘI REFACEREA CRUROPLASTIEI DATORITĂ PERSISTENȚEI BOLII DE REFLUX ESOFAGIAN DUPĂ GASTRECTOMIE LONGITUDINALĂ ȘI CRUROPLASTIE INIȚIALĂ

CONVERSION TO GASTRIC BYPASS AND REVISION OF CRUROPLASTY DUE TO PERSISTENT GASTROESOPHAGEAL REFLUX DISEASE AFTER INITIAL SLEEVE GASTRECTOMY AND CRUROPLASTY

C. E. Boru, G. Silecchia

Universitățea La Sapienza Di Roma, Polo Pontino, UOC Chirurgia Generale & Bariatric Center of Excellence-IFSO EC, Latina, Italia

Introduction: Recently, dramatically increased numbers of bariatric procedures worldwide are followed by an increased incidence of revision surgeries, due to complications or failures.

Objectives: To evaluate the role of laparoscopic gastric bypass in the treatment of gastroesophageal reflux disease after sleeve gastrectomy.

Methods: A morbid obese, female patient, 55 years old, BMI 39 kg/m², with concomitant HTA, hyperinsulinemia and 3 cm, non-complicated hiatal hernia, was operated in 2013 by laparoscopic sleeve gastrectomy (LSG) and concomitant hiatal hernia repair by posterior cruroplasty. 30 months afterwards a resolution of obesity and comorbidity was obtained, with BMI of 25.7 kg/m². Meantime, symptomatic, persistent gastroesophageal reflux disease, resistant to medical treatment, with radiological confirmed hiatal hernia, was registered. Results: we present the video of laparoscopic conversion of gastric sleeve to R-en-Y gastric bypass (GBP), with concomitant revision of the posterior cruroplasty. An important improvement of the patient's symptoms was achieved 3 months postoperatively, with suspension of medical therapy, maintained one year after intervention.

Conclusions: Conversion in GBP is actually the best option of treatment in case of reflux disease after LSG.

e-POSTER (P)

P-01

UN REVIEW SISTEMATIC ȘI META-ANALIZĂ A ANATOMIEI CHIRURGICALE A VASELOR COLICE DREPTE CU IMPACT ÎN REZEȚIA LAPAROSCOPICĂ COMPLETĂ A MEZOCOLONULUI ÎN TUMORILE DE COLON DREPT

A SYSTEMATIC REVIEW AND META-ANALYSIS OF RIGHT COLIC VESSELS SURGICAL ANATOMY WITH IMPACT IN LAPAROSCOPIC COMPLETE MESOCOLIC EXCISION FOR RIGHT COLON CANCERS

I. Negoj¹, C. Ciubotaru¹, Adelina-Maria Cruceru¹, Mihaela Vartic², Alina Prodan³, M. Beuran¹

¹Spitalul Clinic de Urgență, Chirurgie Generală III, București, România

²Spitalul Clinic de Urgență, Anestezie și Terapie Intensivă, București, România

³Spitalul Clinic de Urgență, Chirurgie Generală I, București, România

Introduction: Although associated with a better five-year overall survival, the complete mesocolic excision is a difficult technique, which may be accompanied by severe intraoperative complications.

Method: Systematic review of all the major databases, from their inception up to March 2017. We have calculated the pooled prevalence of the right colic artery (RCA) and vein (RCV) anatomical relationships, using MetaXL statistical software. We used a random effects model analysis.

Results: The pooled prevalence of right colic artery was 0.601 (0.454 to 0.741, Q=2350.59, I²=99%) of cases. The RCV drained into the superior mesenteric vein, ileocolic vein, and gastrocolic trunk of Henle in 0.490 (0.238 to 0.750, Q=159.37, I²=96), 0.008 (0.000 to 0.087), 0.503 (0.250 to 0.762).

Conclusions: The right colic vessels represent the most inconstant vascular pedicle related to right hemicolectomy.

Keywords: meta-analysis, right colic vessels, surgical anatomy, laparoscopic complete mesocolic excision, right colon cancer.

P-02**ANATOMIA CHIRURGICALĂ A VASELOR COLICE MEDII CU IMPACT ASUPRA EXCIZIEI LAPAROSCOPICE COMPLETE A MEZOCOLONULUI PENTRU TUMORILE DE COLON DREPT: UN REVIEW SISTEMATIC ȘI META-ANALIZĂ****MIDDLE COLIC VESSELS SURGICAL ANATOMY WITH IMPACT IN LAPAROSCOPIC COMPLETE MESOCOLIC EXCISION FOR RIGHT COLON CANCERS: A SYSTEMATIC REVIEW AND META-ANALYSIS**I. Negoii¹, Adelina-Maria Cruceru¹, C. Ciubotaru¹, Mihaela Vartic², M. Beuran³¹Spitalul Clinic de Urgență, Chirurgie Generală III, București, România²Spitalul Clinic de Urgență, Anestezie și Terapie Intensivă, București, România³Spitalul Clinic de Urgență, Clinica Chirurgie III, București, România

Introduction: D3 lymphadenectomy or complete mesocolic excision with central vascular ligation is the most refined technique for right colon cancers. However, it can be associated with significant intraoperative bleeding, perioperative complications challenging its universal implementation.

Method: Systematic review of all the major databases, from their inception up to March 2017. We have calculated the pooled prevalence of the middle colic artery (MCA) and vein (MCV) anatomical relationships, using MetaXL statistical software. We used a random effects model analysis.

Results: The MCA was present in 0.946 (0.902 to 0.979, Q=151.49, I²=91) of specimens. The MCV drainage was into the superior mesenteric vein, gastrocolic trunk of Henle, splenic vein, inferior mesenteric vein, and first jejunal vein in 0.832 (0.746 to 0.896, Q=30.46, I²=80), 0.117 (0.059 to 0.188), 0.015 (0.000 to 0.044), 0.019 (0.000 to 0.050), 0.018 (0.000 to 0.048), respectively.

Conclusions: Surgical dissection of the middle colic vessels maybe produce significant intraoperative bleeding, due to major neighboring vascular structures and large anatomical variability.

Keywords: middle colic vessels, laparoscopic complete mesocolic excision, meta-analysis, central vascular ligation.

P-03**UN REVIEW SISTEMATIC ȘI META-ANALIZĂ A ANATOMIEI CHIRURGICALE A VASELOR ILEOCOLICE CU IMPACT ÎN REZECTIA LAPAROSCOPICĂ COMPLETĂ A MEZOCOLONULUI ÎN CAZUL CANCERELOR DE COLON DREPT****A SYSTEMATIC REVIEW AND META-ANALYSIS OF ILEOCOLIC VESSELS SURGICAL ANATOMY WITH IMPACT IN LAPAROSCOPIC COMPLETE MESOCOLIC EXCISION FOR RIGHT COLON CANCERS**I. Negoii¹, C. Ciubotaru¹, Adelina-Maria Cruceru¹, Mihaela Vartic², Alina Prodan³, M. Beuran¹¹Spitalul Clinic de Urgență, Chirurgie Generală III, București, România²Spitalul Clinic de Urgență, Anestezie și Terapie Intensivă, București, România³Spitalul Clinic de Urgență, Chirurgie Generală I, București, România

Introduction: Complete mesocolic excision represents a challenging technique, although it is associated with significant better long-term oncological outcomes.

Method: We did a systematic review of all the major databases, from their inception up to March 2017. We have calculated the pooled prevalence of the ileocolic artery (ICA) and vein (ICV) anatomical relationships, using MetaXL statistical software. We used a random effects model analysis.

Results: The pooled prevalence of the ICA with a trajectory anterior to the superior mesenteric vein (SMV) was 0.469 (0.444 to 0.494, Q=51.58, I²=81%). The ICV drained in the SMV, gastrocolic trunk of Henle, and jejunal trunk in 0.976 (0.962 - 0.992, Q=14.3, I²=79%), 0.019 (0.000 - 0.065), and 0.005 (0.000 - 0.028) respectively.

Conclusions: The ileocolic vessels represent the most constant vascular anatomical structure of the right colon.

Key words: meta-analysis, ileocolic vessel, surgical anatomy, laparoscopic complete mesocolic excision, right colon cancer.

P-04

ABORDUL LAPAROSCOPIC ÎN LEIOMIOMUL MEZENTERIC

LAPAROSCOPIC APPROACH FOR MESENTERIC LEIOMYOMA

S. Păun, B. Stoica, I. Tănase, I. Negoii, M. Beuran

Spitalul Clinic de Urgență, Chirurgie, București, România

Solid primary tumors of mesenteric origin are quite rare, especially leiomyoma of the mesentery which is an uncommon tumor. This has been documented in adults and children. This type of tumor has usually been found accidentally due to routine abdominal ultrasound or for other pathologies. We present a 35 years old patient admitted in elective setting in Bucharest Emergency Hospital for a retroperitoneal abdominal tumor identified 2 months prior admission. At the abdominal MRI we found a solid tumor of 4/4/3 cm, localized in the left lumboaortic region inferior by the left renal pedicle. Laparoscopic approach was performed and it was found the tumor between left lateral aortic wall and left renal pedicle, in the mesenterium depth. Postoperative evolution was simple, and the patient was discharged after 3 days. The histopathological result was a leiomyoma with haemorrhage and chronic inflammation cells. In conclusion, the laparoscopic approach is feasible when is used by the surgeons with good skills in minimally invasive surgeries.

P-05

ISTORIA, PREZENTUL ȘI VIITORUL TRAININGULUI ÎN CHIRURGIA LAPAROSCOPICĂ COLORECTALĂ

HISTORY, PRESENT AND FUTURE OF LAPAROSCOPIC COLORECTAL TRAINING

R. C. Elisei, F. Graur, N. Al Hajjar, E. Mois, C. Popa

Institutul Regional de Gastroenterologie și Hepatologie „Prof. Dr. Octavian Fodor”, Clinica Chirurgie II, Cluj-Napoca, România

Colorectal laparoscopic training is in a permanent development and searching for the best training method which can provide in the same short period of time advanced laparoscopic skills in a specific surgical domain, that can lead to less complications in the operating room (OR), reduction of the operating time, unnecessary movements and errors and can provide a standardization of laparoscopic training. We make a brief overview of all types of laparoscopic training methods developed until now for colorectal surgery: artificial models, virtual reality, real models; and think towards the future of laparoscopic training models in colorectal surgery (ex.: hologram haptic virtual reality) that will be able to provide a colorectal laparoscopic surgery simulations very close to the real situation found in the OR. Analyze of the opportunity to introduce the laparoscopic simulated interventions exam to be mandatory in obtaining the senior laparoscopic surgeon degree all over the European Union.

P-06

DISPOZITIV MEDICAL AUTOMATIZAT PENTRU BIOPSII FOLOSIND UN PISTOL DE BIOPSIE

AUTOMATED MEDICAL INSTRUMENT FOR TARGETED BIOPSIES USING A BIOPSY GUN

I. Bîrlăscu¹, F. Graur², C. Vaida¹, Doina Pîslă¹, N. Plitea¹

¹*Universitatea Tehnică, CESTER, Cluj-Napoca, România*

²*Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Chirurgie, Cluj-Napoca, România*

Robotic assisted biopsies are one of the tasks performed by the robotic systems in the field of robotic assisted needle placement. The necessity of such systems aroused due the accuracy required in needle placement, in order to perform a reliable targeted biopsy. Biopsy guns are reliable of the shelf medical tools used in tissue sampling. One particular way to achieve precise biopsies is by guiding a specialized instrument (with the biopsy gun mounted), with the help of a robotic system, towards the targeted areas, followed by precise needle insertion and biopsy gun firing. With a modular mounting frame, the instrument may be mounted and guided by various robotic systems (e.g. BIO-PROS 1 for prostate biopsies,

PARA-BRAHIROB for liver, breast, thyroid biopsies). With a linear, redundant motion (independent of robot motion) for insertion and retraction, the procedure benefits from increased accuracy and decreased risk (i.e. the needle insertion is free of robot control anomalies since the singularities are avoided). The development of such automated instruments shows feasible practical applications regarding medical needle placement tasks.

P-07

DISPOZITIV AUTOMAT PENTRU INSERȚIA ELECTRODULUI PENTRU ABLAȚIA CU RADIOFRECVENȚĂ

AUTOMATED INSTRUMENT USED FOR RADIO FREQUENCY ABLATION NEEDLE INSERTION

F. Graur¹, I. Bîrlescu², C. Vaida², Doina Pîslă², N. Plitea²

¹Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Chirurgie, Cluj-Napoca, România

²Universitatea Tehnică, CESTER, Cluj-Napoca, România

Radio frequency ablation (RFA) is one type of thermal ablation, used in liver tumor treatment. The procedure is based on delivering, in a controlled manner, a dose of electromagnetic radiation in the radio spectrum which heats the tumor tissue until necrosis. In order to deliver the electromagnetic radiation into the tumor volume, specialized needles are used, which may be inserted percutaneously or intraoperatively, depending on the case. Following the insertion of the needle, a set of electrodes, that are inside the needle cannula, are inserted to cover the desired volume. Robotic assisted needle placement may increase the target accuracy since usually a robot outperforms human beings in dexterity tasks. PARA-BRACHYROB is one example of such robotic system capable to insert an RFA needle within the tumor tissue, followed by the electrode insertion in a precise way. The robotic system guides an instrument with the RFA needle mounted on, towards the insertion point, followed by the needle insertion on a linear path and the electrode insertion, with two degrees of freedom which are redundant with the output motion of the robotic system. The redundancy offers increased needle placement precision and reduced procedure risk, since the medical task is performed in a sequential approach with validation of each step, which makes the robot control failure (due to singularities) impossible.

P-08

ABORD MINIM INVAZIV ȘI NON-OPERATOR ÎN ABCESELE HEPATICE

MINIMALLY INVASIVE AND NON-OPERATIVE APPROACH IN HEPATIC ABSCESS

I. Lică¹, Diana Teodora Suhaciu¹, Andra Evtodiev², G. Jinescu¹

¹Spitalul Clinic de Urgență, Chirurgie II, București, România

²Spitalul Clinic de Urgență, Chirurgie II, București, România

Hepatic abscess is caused by the development of intra-hepatic pus collection, secondary to a local inflammatory reaction by bacteria infection in the hepatic parenchyma. Amebic liver abscess is the most frequent extraintestinal manifestation of *Entamoebahistolytica* infection. The incidence of HA secondary to *Klebsiella pneumoniae* is increasing and can give rise to other distant septic metastases. Diagnosis depends mainly on imaging (sonography and/or CT scan) with confirmation by needle aspiration for microbiological identification. Treatment is based on antibiotics, percutaneous or surgical drainage and control of the primary source. The use of less invasive procedures diminish morbidity and hospital stay. We present two particular cases of hepatic abscess. We present the case of a 40 years old patient, who presented with right upper quadrant pains, jaundice, fever, weight loss, symptoms started 3 days before hospital presentation. Primary laboratory results showed leucocytosis and hyperbilirubinemia. Abdominal CT scan revealed one voluminous abscess (11.3/9.3 cm) in VIII and V liver segments and another small abscess (32 mm) in segment III. Laparoscopic approach was considered for diagnosis and treatment. The surgical procedure consisted in drainage of abscesses and the microbial result of pus was *Entamoebahistolytica* infection. The medical treatment included Metronidazole and the patient was discharged 14 days later with no complications. We present a 52 years old patient who presented with fever and epigastric pains, symptoms for 2 weeks. Laboratory results showed leucocytosis and hepatic cytolysis. Abdominal CT scan revealed one lesion (8/5 cm) in IV and VI liver segments and two more similar lesions (5/6/5 cm and 9/9/7 cm). Double percutaneous drainage guided by ultrasound was installed, with maintenance of drainage in situ, applied in a surgical environment, with sedation and local

anesthesia. Associated antibiotic therapy was needed, the microbial result of pus was *Klebsiella* spp. The patient was discharged 15 days later with no complications. Antibiotics, interventional radiology, and surgical therapy can be used, combined or as a single therapy. The combination of interventional radiology (aspiration or drainage) with antibiotics has shown better results in hospitalization, morbidity, mortality and complications.

P-09

COLECISTECTOMIE SILS - INSTRUMENTAR STANDARD LAPAROSCOPIC

SINGLE INCISION MULTIPOINT LAPAROSCOPIC CHOLECISTECTOMY USING STANDARD LAPAROSCOPIC INSTRUMENTS

G. Jinescu¹, I. Lică¹, Diana Teodora Suhaciu², Andra Evtodiev¹

¹*Spitalul Clinic de Urgență, Chirurgie II, București, România*

²*Spitalul Clinic de Urgență, Chirurgie II, București, România*

Introduction: Single incision laparoscopic surgery (SILS) has certain advantages concerning cosmetic aspect, less incisional pain, possible conversion to classic multiport laparoscopic surgery if needed. The primary disadvantages of SILS are the restricted degrees of freedom of movement, the number of ports that can be used, and the proximity of the instruments to each other during the operation all of which increase the complexity and technical challenges of the operation. The objective of this study is to evaluate the safety and feasibility of the SILS cholecystectomy with conventional instrumentation as a standard technique with low costs. We use one of 10 mm for the optical trocar and two 5 mm working trocars. We did not use additional transabdominal sutures to stabilize the gallbladder. Our method involves the use of existing standard instruments.

Methods: We operated 10 patients with gallbladder lithiasis using SILS technique. The procedure began with a J skin incision approximately 2 cm length in the umbilical scar, and then the abdominal cavity is insufflated using a Veress needle followed by a dissection of the surrounding subcutaneous tissue. Three fascial incisions are performed: one of 10 mm for optic trocar placement at the lower point of the incision, and two 5 mm working trocars on the horizontal part of the J incision (Mickey Mouse Technique). Cholecystectomy is performed similar to that made by conventional laparoscopy, taking care to expose safely the cystic duct and artery. During the procedure it may be necessary to change one trocar of 5 mm with one of 10 mm in order to use the 10 mm clip applicator and to use this trocar to extract the gallbladder.

Results: Ten cholecystectomies were completed successfully with the proposed technique between January 2016 and December 2016. The mean patient age was 35 years (range 26-86), and average BMI was 26 (range 18-30). One case was converted to classical laparoscopic approach due to adhesions. Systematic assessments prove adequate healing of the umbilical access with no local complications. Follow-up was performed at one month postoperatively.

Conclusions: This study demonstrates that in certain cases laparoscopic cholecystectomy could be safely performed through a single umbilical incision using multiple trocars. Our initial experience found no complications and better cosmetic results, similar use of analgetics and hospital stay as reported in conventional cholecystectomy technique with 4 trocars.

P-10

SIGURANȚA PACIENȚILOR ÎN INTERNAREA DE ZI ÎN SECȚIILE CHIRURGICALE ALE SPITALELOR

PATIENT SAFETY IN DAY HOSPITALIZATION IN HOSPITAL SURGERIES

Adriana Grindean¹, Carmen Daniela Domnariu²

¹*Spitalul Militar de Urgență "Dr. Alexandru Augustin", Chirurgie Generală, Sibiu, România*

²*Universitatea „Lucian Blaga”, Facultatea de Medicină „Victor Papilian”, Sibiu, România*

Day care is a quick and effective alternative to avoid continued admission. Day care has advantages: saving time and money, recovering patients in their own home, reduced risk of in-hospital infections, but also disadvantages: inadequate pain control, complications that occur if the patient is discharged too early. The objective of the paper is to highlight the effectiveness of using patient assessment protocols and selection criteria for daily hospitalization according to standards used worldwide to increase patient safety. The inclusion or exclusion criteria for a day hospital should include patient assessment protocols through a multidisciplinary assessment. The assessment falls into three main categories: social

factors (the patient has to understand and agree with the planned procedure, if he / she was anesthetized generally, he / she needs to have a companion to home and support within the first 24 hours), medical factors (Preoperative assessment is needed, patients with chronic diseases are better managed as daytime cases) and surgical factors (the procedure should not have a significant risk of serious complications, postoperative symptoms should be controllable). Patient selection questionnaires will be used for day-to-day hospitalization. The first preoperative questionnaire is for internment assessment, which will include questions about home conditions, the current condition of the patient, allergies, alcohol consumption, drugs, etc. With closed questions and the second consists of a discharge checklist, which contains several criteria (vital signs, hydration, elimination, pain, etc.). The use of assessment protocols and selection criteria according to the standards used throughout the day in hospitalization improves the services provided and increases the patient's safety.

P-11

NEFRECTOMIA PARȚIALĂ PENTRU TUMORI RENALE CT1

LAPAROSCOPIC PARTIAL NEPHRECTOMY FOR CT1 RENAL MASSES

D. Diaconescu, F. Vârzescu, I. Chira, G. Roșoga, R. Petca, R. Danau, V. Jinga, B. Braticevici
Spitalul Clinic „Prof. Dr. Th. Burghel”, Urologie, București, România

Introduction: The preferred surgical management of small renal masses is represented by partial nephrectomy. Taking into account the potential benefits of nephron sparing surgery and the shift to minimally-invasive approaches, partial nephrectomy, especially via less invasive techniques has become a point of interest in recent years. Our study examined perioperative morbidity of laparoscopic partial nephrectomy (LPN) analyzing complication rates and postoperative results.

Material and Method: Between 1st January 2011 - 31st July 2017, 68 patients in our clinic underwent partial nephrectomy, 25 out of those underwent LPN. The surgical indication was given by the imagistic display (CT or MRI) of a renal tumor < 70mm. The group was analyzed by age, Charlson comorbidity index, eGFR, clinical size and PADUA score. 5 patients had an absolute surgical indication, 1 had a relative indication, while 19 had an elective indication.

Results: The average age was 58.26 years (24 - 73 years). Median tumor size was 33.54mm. Median follow-up was 23.35 months, without significant difference with respect to complication rates between the techniques. Median ischemia time was longer for LPN (18.34 minutes), while median eGFR drop was inferior for LPN. Postoperative hospitalization period was shorter for LPN (5.97 days).

Conclusions: Laparoscopic partial nephrectomy has similar postoperative results when compared to classic partial nephrectomy, as long as the operating teams benefit from a similar surgical experience. Although LPN is associated with a shorter postoperative hospital stay, faster recovery and socio-professional reintegration.

P-12

EXPERIENȚA NOASTRĂ ÎN PIELOPLASTIA LAPAROSCOPICĂ TRANSPERITONEALĂ

OUR EXPERIENCE WITH TRANSPERITONEAL LAPAROSCOPIC PYELOPLASTY

D. Diaconescu, F. Vârzescu, G. Roșoga, B. Braticevici, V. Jinga
Spitalul Clinic „Prof. Dr. Th. Burghel”, Urologie, București, România

Introduction: The goal of the study was to evaluate the results obtained in 72 patients who underwent laparoscopic pyeloplasty through transperitoneal access for ureteropelvic junction (UPJ) obstruction.

Materials and Methods: During January 2011 and May 2017, 72 laparoscopic interventions were performed for ureteropelvic junction (UPJ) stenosis via a transperitoneal access. The average age was 34.6 years (patients from 20 to 74 years old). All patients had clinical symptoms of high urinary obstruction and hydronephrosis confirmed imagistically (ultrasound, urography and CT scan). The preferred technique was Anderson-Hynes dismembered pyeloplasty (93%), followed by X-Y pyeloplasty. All patients were clinically and imagistically evaluated 3 months after the intervention.

Results: The average operative time was 138,2 min (110 - 200min) and the mean post-operative hospital stay was 4.68 days. The average blood loss was minimal and in 36.1 % cases vascular anomalies were identified. Conversion to conventional surgery was needed in only 2 cases. Prolonged drainage, prolonged ileus, intraperitoneal collection were early

postoperative complications, with no major later postoperative surgery related complications reported. The success rate was approximately 97%.

Conclusions: Both laparoscopic pyeloplasty and conventional open technique have comparable results when done by surgical teams with enough experience. The advantages of the laparoscopic pyeloplasty are reduced hospital stay and time to recovery, better cosmetics.

P-13

TRATAMENTUL LAPAROSCOPIC AL PSEUDOCISTURILOR PANCREATICE MARI: SERIE DE 3 CAZURI LAPAROSCOPIC TREATMENT OF LARGE PANCREATIC PSEUDOCYSTS: THREE-CASE PRESENTATION

S. Păun, I. Tănase, B. Stoica, I. Negoii, M. Beuran

Spitalul Clinic de Urgență, Chirurgie Generală, București, România

Introduction: Pancreatic pseudocysts are along with peripancreatic fluid collections the most common complications of acute pancreatitis. Each reaching significant incidences of 41% and respectively 60%, they require a tailored attitude with particular attention on minimally invasive techniques.

Case Presentations: We present a series of 3 cases admitted in Bucharest Emergency Clinical Hospital with intense pain in the upper abdomen. 2 of these patients previously had acute pancreatitis and in the latter case the symptomatology and treatment started 2 weeks prior the admittance. All the cases presented elevated serum levels of pancreatic enzymes, and mild leucocytosis. CT-exam showed large pancreatic pseudocysts ranging 8-16 cm, some of them associating multiloculated intraabdominal and/or retroperitoneal collections. Laparoscopic drainage and lavage of these collections was successful in 2 cases. Approximately 1500 and 2800 ml of purulent liquid were evacuated, necrosectomy and debridement were performed. In one case cystectomy was also performed. In one case, conversion was needed due to the posterior position of the pseudocyst and impossibility of proper identification. No mortality was encountered in this group but postoperative complications as recurrent intraabdominal collections and partial superior mesenteric vein were encountered. Relaparoscopy was done in one case.

Conclusion: Laparoscopic pancreatic pseudocyst drainage is a feasible option in selected patients, who benefit from a good imaging assessment and skilled surgical hands.

Keywords: pancreatic pseudocyst, laparoscopic drainage.

P-14

COLECISTECTOMIA LAPAROSCOPICĂ SILS (INCIZIE UNICĂ TRANSOMBILICALĂ) - ÎNTRE LIMITE ȘI POSIBILITĂȚI SILS LAPAROSCOPIC CHOLECISTECTOMY - BETWEEN LIMITS AND POSSIBILITIES

Marina Dumitraș, B. Barta

Spitalul Euroclinic - Regina Maria, Chirurgie Generală, București, România

Objective: The aims of our study was to analyze the feasibility of the SILS approach in patients with biliary lithiasis, both forms (chronic and acute), the indications and the limitations of the method.

Material and Methods: The study was retrospective, performed on a group of 398 patients operated in our clinic between January 2012 and May 2017, with the SILS laparoscopic cholecystectomy as the first option, following the Dapri - modified technique.

Results: Out of the 398 cases chosen to be operated by SILS, 83.4% were completed in this manner, the rest of 16.6% requiring either the introduction of an additional trocar or the installation of a sub hepatic drainage (SILS + 1). In the 332 cases operated in SILS, 15.3% were acute cholecystitis, the rest being chronic. In the 66 cases operated SILS + 1, 74.2% were acute cholecystitis, advanced forms (phlegmonous, gangrenous, vesicular hydrops), the remaining 25.8% being forms of chronic lithiasis cholecystitis, which associated important comorbidities (obesity, postoperative adherence syndrome, etc.). In none of the cases operated SILS or SILS + 1 significant intraoperative complications were reported and there was no other surgical intervention. Regarding the distant complications of the 398 cases operated, in 2 cases there was found overdue lithiasis remaining in main gall bladder, solved by ERCP.

Conclusions: SILS cholecystectomy may be the first option for both chronic and acute cholecystitis. The technique allows at any time conversion to an adapted shape (SILS + 1) or to the classic laparoscopy.

P-15

HEMATOM MASIV ORGANIZAT INTERHEPATOFRENIC ȘI SUBHEPATIC - COMPLICAȚIE A COLECISTECTOMIEI LAPAROSCOPICE

MASSIVE INTERHEPATOPHRENIC AND SUBHEPATIC ORGANIZED HEMATOMA - COMPLICATION OF LAPAROSCOPIC CHOLECYSTECTOMY

C. G. Florea¹, L. I. Gheorghiu¹, T. V. Nacev¹, Elena Violeta Coman¹, I. S. Coman¹, Oana Ilona David¹, V. A. Porojan¹, Raluca Maria Cîrstina², V. T. Grigorean¹

¹*Spitalul Clinic de Urgență „Bagdasar-Arseni”, Chirurgie Generală, București, România*

²*Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Facultatea de Medicină, București, România*

Introduction: Nowadays, laparoscopic cholecystectomy is the standard in the treatment of acute cholecystitis, the most common complications of which are hemorrhagic complications. Intraperitoneal hemorrhage (from the cystic or the cystic artery blunt) occurs especially during the first 24 hours postoperatively, being diagnosed and quickly detected due to the outward exposure of fresh blood to the drainage tube.

Materials and Methods: We present the case of a 18-year-old patient who had cholecystectomy 18 days before presenting in Emergency Room within “Bagdasar-Arseni” Emergency Hospital for an altered general state, pain in the right hypochondrium and fever, symptomatology that started 7 days earlier, being diagnosed (CT examination) with a massive interhepatophrenic and subhepatic organized hematoma of approximately 14/10 cm. Emergency surgery is tried, but the patient has an allergic reaction with the appearance of generalized cutaneous erythema. The patient is transferred to the ICU for rebalancing and preoperative training. Surgical intervention and evacuation of the hematoma are made, multiple peritoneal drainage are done.

Results: The patient has favorable postoperative evolution, with suppression of all peritoneal drainage tubes. Abdominal ultrasound does not detect intraperitoneal pathological processes.

Conclusion: Although the hemorrhagic complications of laparoscopic cholecystectomy occur within the first 24 hours postoperatively, being rapidly diagnosed, they may occur at a distance with the formation of intraperitoneal hematomas.

P-16

RECOLTAREA ENDOSCOPICĂ A MUȘCHIULUI DREPT ABDOMINAL - STUDIU EXPERIMENTAL

ENDOSCOPIC RECTUS ABDOMINIS MUSCLE HARVESTING - EXPERIMENTAL STUDY

A. Blidișel¹, Alexandra Manea¹, A. Tărbău¹, L. Misca², O. Crețu¹

¹*Spitalul Clinic Municipal de Urgențe, Chirurgie Generală I, Timișoara, România*

²*UMFT, Semiologie Chirurgicală I, Timișoara, România*

Aim: The minimal invasive surgery became the golden standard in surgery. This approach represents a modern tool in reconstructive surgery by using the endoscopic techniques for harvesting muscular free flaps. To develop an experimental model for endoscopic assisted harvesting of the rectus abdominis muscle flap.

Material and Methods: We used common breed pigs 25-30kg(n20), a video laparoscopic unit with 4mm and 5mm Hopkins II and Emory hand retraction systems.

Results: Evaluation criteria was: duration of surgery, rate of conversion, intraoperative bleeding, viability of the flap, length and aspect of the pedicle.

In conclusion, this is an excellent training model that promotes improving skills, specific experience and clinical applicability.

P-17

**ABORDUL LAPAROSCOPIC AL TESTICULULUI ECTOPIC ÎN CLINICA DE CHIRURGIE GENERALĂ - PREZENTARE DE CAZ
LAPAROSCOPIC APPROACH OF ECTOPIC TESTICLE IN A GENERAL SURGERY DEPARTMENT - CASE REPORT**

I. S. Coman¹, Elena-Violeta Coman², C. G. Florea¹, Oana Ilona David¹, V. T. Grigorean²

¹Spitalul Clinic de Urgență „Bagdasar-Arseni”, Chirurgie Generală, București, România

²Spitalul Clinic de Urgență „Bagdasar-Arseni”, Universitatea de Medicină și Farmacie „Dr. Carol Davila”, Chirurgie Generală, București, România

Study Objective: 20-30% of the patients with criptorhidie have non-palpable testicles. Etiology of criptorhidie is multifactorial: small birth weight, abnormal development of hipotalamus-pituitary gland axis, implication of the substance that inhibits the mullerian ducts, the abdominal press.

Means and Methods: we present the case of a 25 years old patient, admitted to the General Surgery Department of the „Bagdasar-Arseni” Clinical Emergency Hospital with the diagnosis of right testicular ectopy. Following the investigations performed in another medical unit, no reproductive function is found in the right testicle. The abdominal ultrasound and the abdominal MRI (magnetic resonance imaging) discover the right testicle in the peritoneal cavity.

Results: we proceed to a surgical intervention using a laparoscopic approach - intraperitoneal we find the testicle at about 2 cm superior of the internal inguinal orifice, with normal aspect. A biopsy is taken - the extemporaneous histopathological result doesn't identify malignant cells, but on the other hand finds no activity in the sperm cells. A right orchiectomy is performed, with a favorable postoperative outcome.

Conclusions: laparoscopic approach of testicular ectopies can be successfully used both for a diagnostic biopsy and as a therapeutic procedure.

Keywords: ectopy, testicle, laparoscopy.

P-18

COLECISTECTOMIA LAPAROSCOPICĂ ÎN PATOLOGIA BILIARĂ SPITALUL CLINIC JUDEȚEAN ORADEA CHIRURGIE I ȘI II - STUDIU RETROSPECTIV

LAPAROSCOPIC CHOLECYSTECTOMY IN THE BILIARY PATHOLOGY COUNTY CLINICAL EMERGENCY HOSPITAL ORADEA SURGERY I AND II - RETROSPECTIVE STUDY

Mariana Ungur

Facultatea de Medicină și Farmacie Oradea, Chirurgie, Oradea, România

Objectives: The main objective of this scientific paper is to present, in general, the different surgical options in biliary pathology and, particularly, the laparoscopic cholecystectomy as a therapeutic approach to subjects with biliary pathology hospitalised in surgical wards at the County Clinical Emergency Hospital, Oradea.

Methods: This is a retrospective study over a 5 year period, 2010-2014, of patients hospitalised with various biliary pathologies, who underwent cholecystectomy.

Results: In the period 2010-2014, 6.706 patients with biliary pathology were hospitalised in the County Clinical Hospital Oradea. From the total of 6.706 patients with biliary pathology, 5.421 were hospitalised in the surgical wards of the County Hospital, with 4.228 patients undergoing various surgical procedures. Of the total surgical interventions performed, classical cholecystectomy had a share of 1.761, with conversion after the laparoscopic attempt performed in 35 cases. Laparoscopic cholecystectomy was performed in 2.297 subjects, of whom, 14 subjects required laparoscopic cholecystectomy with extraction of the common bile duct calculus through the cystic duct.

Conclusions: In the pathology of gallbladder and biliary ducts, of the subjects studied, laparoscopic cholecystectomy was the elective surgical option, even in cases of choletithiasis with acute gallbladder inflammation. In the selected cases, duct stones, it can be suitable to associate two mini-invasive procedures: laparoscopic cholecystectomy and endoscopic retrograde cholangio-pancreatography.

Key words: laparoscopic cholecystectomy, biliary pathology.
