Image Quiz for surgeons

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Gastric Metastasis of Cervix Uteri Carcinoma, Rare Cause of Lower Gastric Stenosis

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Rezumat

Metastază gastrică de carcinom de col uterin, cauză rară de stenoză antrală

Scop: lucrarea prezintă un caz rar de metastază gastrică metacronă cu punct de plecare un neoplasm de col uterin manifestată clinic printr-o stenoză pilorică severă.
Metodă: pacientă de 49 de ani, operată în ianuarie 2009 cu o histerectomie totală cu anexectomie bilaterală pentru un carcinoma scuamos de col uterin $T_{2b}N_1M_0$, este spitalizată în serviciul nostru în august 2011 cu fenomene de stenoză pilorică severă, prezentând dureri epigastrice, vărsături de stază abundente, scădere ponderală semnificativă, stomac vizibil la inspecția abdominală. La endoscopia digestivă superioară se descrie o stenoză antrală cu mucoasă intactă iar la CT: o masă circumferențială intramurală la nivelul antrului gastric, stomac mult dilatat în amonte, lipsa planului de clivaj între tumoră şi patul hepatic al VB, status postcolecistectomie. Markerii tumorali sunt crescuți: CEA 13,78 (normal sub 5), CA19-9 29,9 (normal sub 27). Cazul a fost interpretat ca un neoplasm gastric primar, o a doua neoplazie la această pacientă şi s-a practicat o gastrectomie subtotal cu limfadenectomie D2 (1 ganglion pozitiv din 27), în bloc cu hepatectomie atipică 4-5, montaj în "Y" Roux.
Rezultate: Examenul anatomopatologic a pus în evidență o metastază de carcinom scuamos de origine uterine ce invadează toate straturile peretelui gastric mai puțin mucoasa şi penetrează țesutul hepatic adiacent, producând metastaze într-un ganglion perigastric. Evoluția postoperatorie imediată şi la distanță a fost favorabilă, pacienta fiind "tumor-free" la 15 luni postoperator.
Concluzie: În literatură mai sunt descrise 2 cazuri de metastază gastrică de cancer de col uterin, precum şi 4 cazuri de metastaze gastrice cu punct de plecare uterin fără specificare, dar la niciunul nu este documentată histologic filiația tumoră primară-metastază, nu sunt date amănunte despre rezecabilitate sau *follow-up-ul*. Din acest punct de vedere, acest caz este primul documentat de metastază gastrică metacronă rezecabilă de cancer cervical uterin din literatură.

Cuvinte cheie: metastază gastrică, neoplasm de col uterin metastatic

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Abstract

Aim: the paper presents a rare case of metachronous gastric metastasis of uterine cervix cancer, clinically manifested through severe pyloric stenosis.

Method: 49-year-old patient, operated on in January 2009, with uterine cervix cancer (Squamous cell carcinoma $T_{2b}N_1M_0$), is hospitalized in August 2011 with pyloric stenosis: epigastric pains, abundant, stasis, late postprandial emesis, significant weight loss, stomach form visible upon abdomen inspection. Endoscopy: antral stenosis with intact gastric mucosa, and CT-scan: circumferential intramural gastric tumor, stomach dilated in the upper part, lack of cleavage between the tumor and the liver bed of the gall bladder. CEA increased to 13,78 (below 5), CA 19-9 slightly increased 29.9 (below 27). The case is considered as a second neoplasia and a D2 subtotal gastrectomy was performed, with 1 positive ganglion out of 27 on block with atypical hepatectomy of segments 4-5 for liver invasion, the final mounting being Y Roux.

Results: The histopathological examination shows a gastric metastasis of squamous carcinoma, of uterine cervix origin, the invaded perigastric ganglion having the same aspect of uterine cervix carcinoma. The post-surgery evolution was favorable, under chemo radiotherapy the patient being alive without relapse at 9 months post-surgery.

Conclusion: In the literature there are 2 more cases of gastric metastasis of uterine cervix carcinoma, and 4 of uterine carcinoma without topographic indication, but without the histological documentation of the tumor filiation, without data related to resecability or follow-up, the case at hand being, from this perspective, the first documented resectable metachronous gastric metastasis from a cervix uteri carcinoma.

Key words: gastric metastasis, metastasis of uterine cervix cancer

Introduction

The stomach is rarely the area of metastases, most of the gastric tumors being primary neoplasms.

Case report

We present the case of a 49-year-old female patient, first operated on in January 2009, with uterine squamous carcinoma moderately differentiated, non-keratinized $pT_{2b}N_1M_xG_2R_xL_1V_1$, with invasion in the left parameter and vaginal wall. Post-surgery, the patient went through chemo- and radio-therapy, the evolution being favorable, the periodic investigations showing the absence of the recidive, locally and at a distance.

The personal antecedents also show a laparoscopic cholecystectomy in 2008 and appendectomy during childhood.

As of May 2011, the patient progressively accused epigastric pains, postprandial plenitude sensation in the epigastrium, late postprandial emesis with non-digested food.

2 weeks prior to admission, the pains become extremely intense, with complete digestive intolerance, stasis emesis, alteration of the general state, weight loss of approx. 5 kg.

An endoscopic investigation shows complete antral stenosis through extrinsic compression, which cannot be surpassed by the endoscope, the gastric mucous having a normal aspect, and the gastric body being full of food remains.

Abdominal MRI shows a stasis in the vertical stomach, largely relaxed, and at the level of the gastric antrum and pyloric area, a 6 cm tumor completely effacing the digestive lumen, without cleavage area with the liver bed of the gall bladder, with periduodenal visible adenopathy (Fig. 1). Tumoral markers: CEA 13,78 ng/ml (below 3,8) and CA 19-9: 29,96 U/ml (below 27).

The surgical treatment consisted in subtotal gastroectomy with lymphadenectomy D2, anastomotic layout shaped as „Y" Roux, omentectomy, atypical hepatectomy of segments 4-5 at the level of a liver invasion. Double drainage of the surgical area. As a technical particularity, we note the presence of an accessory left liver artery from the left gastric artery, which required the coronary ligature distal from the left liver artery emergence (Fig. 2).

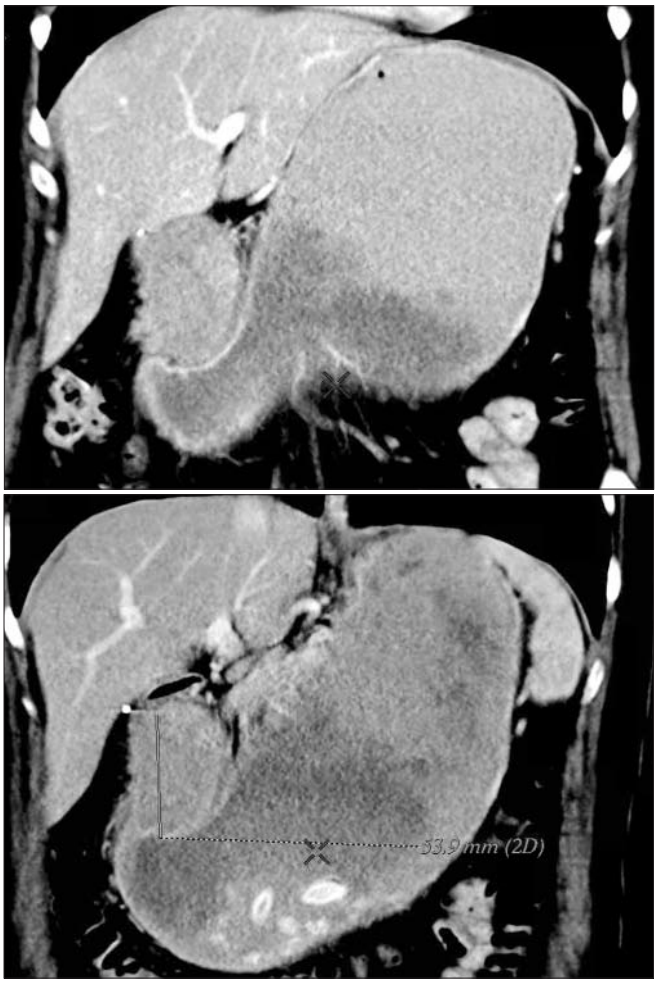

Figure 1. *Preoperative CT-scan. Stenosis aspect of distal gastric pole with a large antropyloric tumor*

The post-surgery evolution was simple, with discharge from hospital on the 6th day post-surgery.

The histopathologic examination of the surgical part shows an intra-mural antropyloric tumoral nodule corresponding to intraparietal metastasis of focal keratinized squamous carcinoma, well differentiated, aspect compatible with the uterine cervix carcinoma known and treated in 2009. The tumor penetrates all strata of the gastric wall up to the submucosa, without touching the mucosa, and, towards the outside the tumor exceeds the serous membrane, invading the liver at the level of the hepatectomy part (segments 4-5). All surgical resection margins go through healthy tissue. 28 Lymph nodules were isolated from the operative part. Among them, one, located at the level of the large gastric curve near the tumor, presents a squamous carcinoma metastasis exceeding the capsule. The other 27 lymph nodules are tumor free. The retroduodenal-pancreatic, the celiac and the liver hilum lymph nodules are tumor free.

The hypothesis of a gastric metastasis of uterine cervix squamous carcinoma becomes the most possible scenario, reason for which the histologic samples and the paraffin blocks from the surgery of 2009 were examined, the tumor filiation being obvious (Fig. 3-6).

The adjuvant post-surgery treatment consisted in 6 cycles of Paclitaxel + Carboplatin, plus Radiotherapy with 45 Gy in the gastric area, the patient being alive and without relapse at 9 months post-surgery, the CT control and the tumoral-markers being within the normal limits (Fig. 7).

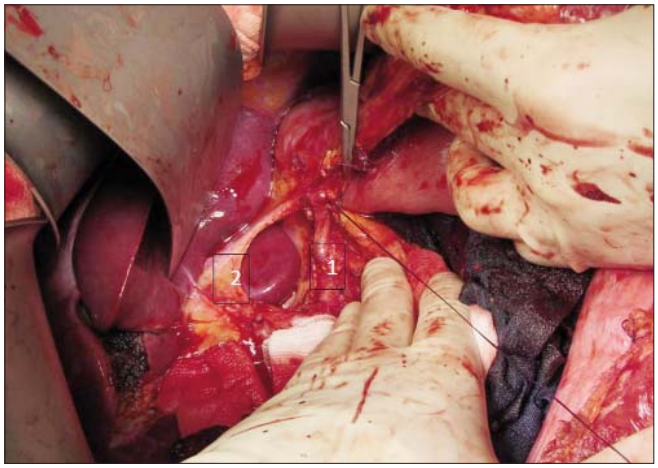

Figure 2. *Dissection of the left gastric artery at its origin (1) with its ligature only after the issue of the accessory left liver artery (2)*

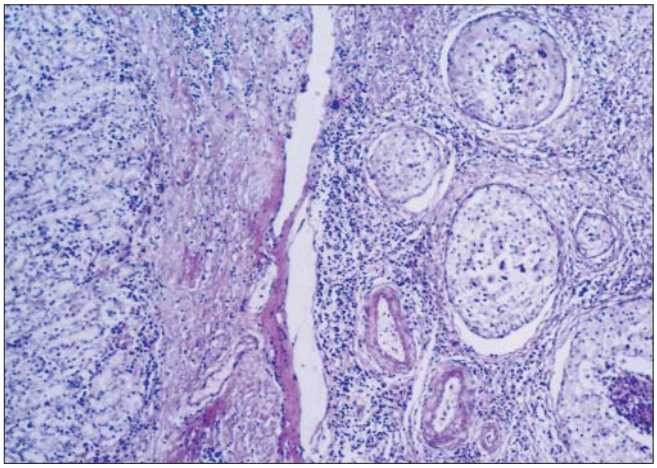

Figure 3. *Gastric metastasis of squamous carcinoma (2011), HE 40x: To notice the well identified, oval shaped tumor placards within the gastric wall. On the left side of the image the antral mucous is visible*

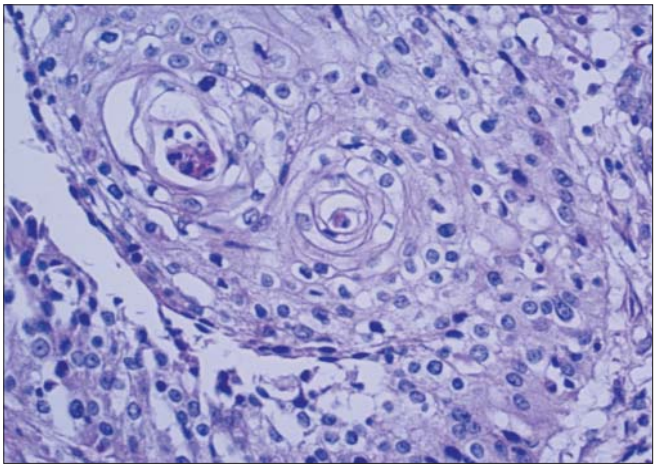

Figure 4. *Gastric metastasis of squamous carcinoma, detail (2011). HE 200x: Tumor cells mark two keratin pearls*

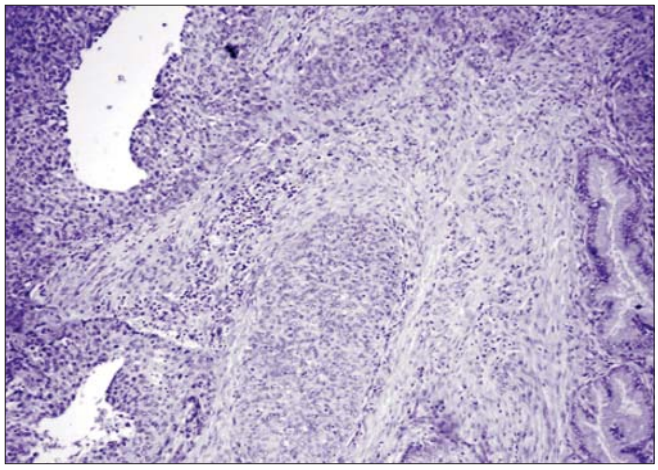

Figure 5. *Primitive uterine cervix tumor (2009), HE 40x: To notice the well identified tumor placards of squamous carcinoma, similar to those in image 1. The tumor penetrates the uterine cervix wall. On the right side of the image, the normal endocervical glands can be noticed*

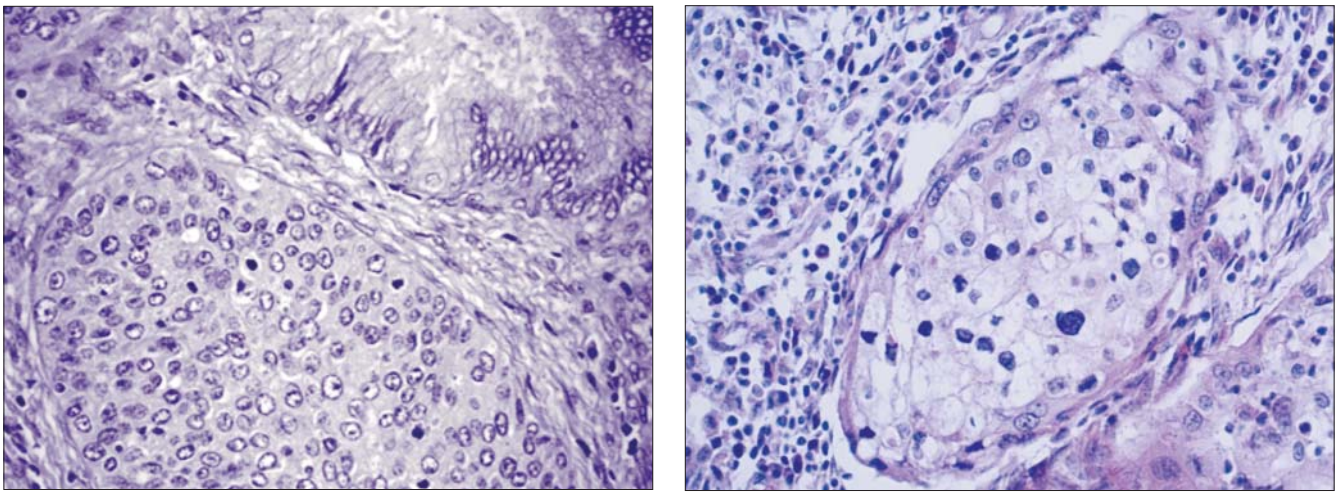

Figure 6. *The primitive tumor of 2011 (left) compared to its gastric metastasis of 2009 (right), HE 200x: Both lesions show the same type of architecture, with oval tumor placards, well identified, included in a fibrous stroma. Still, the degree of cyto-nuclear abnormalities is significantly increased to metastasis level*

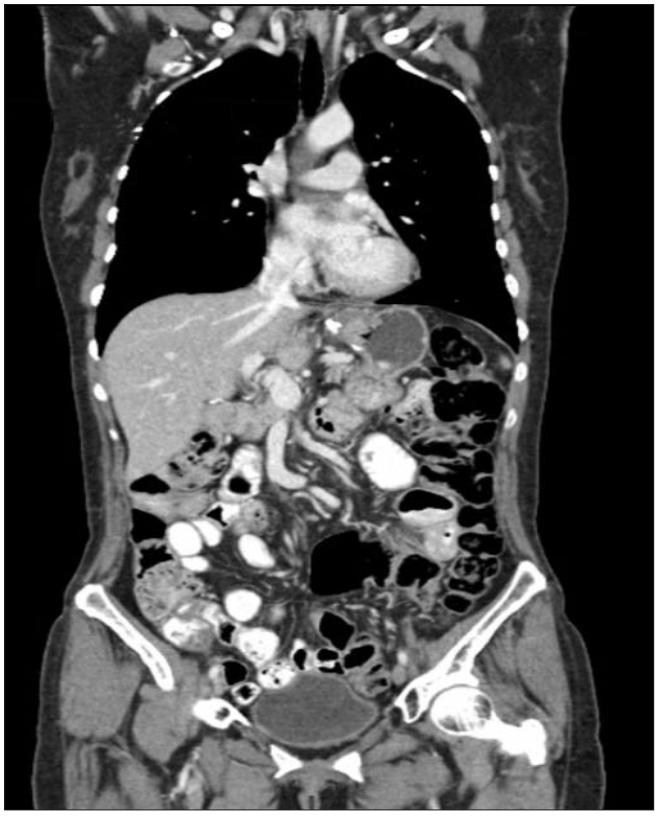

Figure 7. *CT aspect at 9 months post-surgery, without signs of local-regional relapse or at a distance, permeable gastrojejunal anastomosis*

Discussions

The medical literature is extremely poor in cases of gastric metastasis, most publications being case-reports and reviews of maximum 64 cases with various primary tumors (1,2,3,4). There are 2 great gastric metastasis patterns, 1: within multimetastatic cancer [where the gastric metastasis rate may reach 22% - see malignant melanoma (2,3)] - representing most of the cases of gastric metastasis, and 2: sole metachronous gastric metastasis, as in the case in point, a much more rare situation. The most frequent sources of gastric metastases are represented by cancer of the esophagus and malignant melanoma.

The literature describes 2 cases of uterine cervix metastases and 4 cases of "uterine" cancer metastases (without topographical indications), none of them being histologically documented in extenso within the article. Both cases of uterine cervix cancer metastases described by literature presented simultaneous metastases at a distance (liver), therefore being a "pattern 1 - disseminated malady", manifested clinically by high digestive haemorrhage and not by lower gastric pole stenosis, as in the case at hand. There are no data described in medical literature regarding resecability, the follow-up and the prognosis of these rare conditions.

Conclusion

We consider it to be the first case of metachronous gastric metastasis from an uterine cervix squamous carcinoma with histologic documentation in medical literature. Although it is considered that gastric metastasis is a sign of advanced malady, we believe that a sole, metachronous gastric metastases radically operated and following an adequate post-surgery oncological treatment may benefit from an average-long survival rate. We are hopeful that the subsequent evolution of this case, at present disease-free at 15 months post-surgery, shall confirm our hypothesis.

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