Chirurgia (Bucur). 2012;107(4): 510-517

Robotic Surgery of Locally Advanced Gastric Cancer: a Single-Surgeon* Experience of 41 cases

C. Vasilescu[1], L. Procopiuc[2]
[1]Department of General Surgery and Liver Transplantation, Fundeni Clinical Institute, Bucharest, Romania
[2]Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Abstract
The mainstay of curative gastric cancer treatment is open gastric resection with regional lymph node dissection. Minimally invasive surgery is yet to become an established technique with a well defined role. Robotic surgery has by-passed some of the limitations of conventional laparoscopy and has proven both safe and feasible. We present our initial experience with robotic surgery based on 41 gastric cancer patients. We especially wish to underline the advantages of the robotic system when performing the digestive tract anastomoses. We present the techniques of end-to-side eso-jejunoanastomoses (using a circular stapler or manual suture) and side-to-side eso-jejunoanastomoses. In our hands, the results with circular stapled anastomoses were good and we advocate against manual suturing when performing anastomoses in robotic surgery. Moreover, we recommend performing totally intracorporeal anastomoses which have a better post-operative outcome, especially in obese patients. We present three methods of realising the total intracorporeal eso-jejuno-anastomosis with a circular stapler: manual purse-string suture, using the OrVil™ and the double stapling technique. The eso-jejunoanastomosis is one of the most difficult steps in performing the total gastrectomy, but these techniques allow the surgeon to choose the best option for each case. We consider that surgeons who undertake total gastrectomies must have a special training in performing these anastomoses.
Key words: gastric cancer, laparoscopic gastrectomy, robotic gastrectomy, eso-jejunostomy

Corresponding author: Assoc. Prof. Catalin Vasilescu
Fundeni Clinical Institute, Bucharest
258 Fundeni Street, 022328, Bucharest, Romania
E-mail: catvasilescu@gmail.com

*All the procedures were performed by the first author as a console surgeon. We wish to express our special gratitude to the patient-side surgeons Dr. ætefan Tudor, Dr. Monica Popa, Dr. Oana Stãnciulea, whose talent and dedication were essential to these operations.