

### **Robotically Performed Total Mesorectal Excision for Rectal Cancer**

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#### **Abstract**

*Background:* Rectal cancer is an important health problem, due to the increasing number of new cases and the quality of life issues brought forth by surgical treatment in these patients.

*Aim:* The aim of the study was to analyse the results of robotic surgery in the treatment of lower and middle rectal cancer, locations in which TME is performed.

*Material and Method:* Patients diagnosed with and operated on for rectal cancer by the means of robotic surgery between 2008-2012 at the Fundeni Clinical Institute were retrospectively analysed.

*Results:* A number of 117 patients with rectal cancer were operated on by robotic surgery, of which 79 (67.52%) were submitted to total mesorectal excision (TME). The most frequently performed surgery was low anterior resection, followed by rectal amputation through abdominoperineal approach. Anastomosis fistula was observed in 9 (11.39%) patients. Local recurrence was encountered in 2 (2.53%) of the robotically performed surgeries.

*Conclusions:* 1. Robotically assisted total mesorectal excision is feasible, safe and can be performed with a small number of complications and a low local recurrence rate; 2. The main advantages are oncological safety and quality of life; 3. Conversion to open surgery is rarely encountered; 4. Protection loop ileostomy existence allows avoiding reintervention in case anastomotic fistula occurs in patients with low anterior resection. 5. Robotic surgery may become gold standard in the surgical treatment of rectal cancer.

**Key words:** robotic approach, total mesorectal excision, oncological results, morbidity

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