

**COMMENT ON “ENDOSCOPIC STENTING AND DIVERTING COLOSTOMY AS
A BRIDGE TO SURGERY FOR MALIGNANT COLORECTAL OBSTRUCTION”:
BALANCE BETWEEN EVIDENCE-BASED MEDICINE AND PERSONALIZED
THERAPY.**

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We read with much interest the paper by Arezzo et al [1] and the paper by Veld et al [2] which appeared in the November issue of *Annals of Surgery*. Both papers describe patients with acute malignant colorectal obstruction. In a multicenter prospective study Arezzo et al [1] compared 59 patients who had initial resection for acute malignant colorectal obstruction with 56 patients who had placement of a Self Expandable Metallic Stent (SEMS) as a bridge to delayed surgery. At a median follow up of 36 months there was no difference in the two groups in observed and disease free survival. These results may solve the controversy about the possibility that placement of SEMS offers reduced morbidity rates but might have negative oncologic consequences. The paper of Veld et al [2] analyzes retrospectively the outcomes of 472 patients who had emergency resection for malignant colorectal obstruction compared with a matched group of 236 patients who had initial diverting stoma as a bridge to delayed colorectal resection. Veld et al [2] found that patients who had an initial temporary stoma had higher possibilities to have subsequent laparoscopic resection, higher possibilities for a primary anastomosis and better 3 years survival (79% versus 73%). The 708 patients in the two groups were selected from 2048 patients who had surgery for acute malignant colorectal obstruction during a 7 year period (2009-2016) in 75 Dutch hospitals.

SEMS placement and diverting colostomy represent important initial therapeutic approaches for patients with obstructing colorectal cancer. SEMS placement and diverting colostomy as a bridge to definitive resection offer many theoretical advantages with the potential to transform an emergency clinical condition into an elective situation. The patient can be treated after correction of electrolyte and fluid unbalance, common in elderly patient with bowel obstruction. The nutritional status can be also improved. A proper bowel preparation and a full colonoscopy can be performed

considering that in 7% of the patients with left-sided colon and rectal cancer there is a synchronous cancer in the proximal colon. Specific diagnostic tests (CT scan, endoscopic ultrasound etc) may allow a more detailed oncologic treatment including preoperative radio and/or chemotherapy. The two studies show that SEMS and diverting colostomy as a bridge to resection offer several advantages without negative long term oncologic outcomes [3].

SEMS placement is not an easy procedure to perform, namely in emergency [4]. We prefer, unless the colon above the obstruction is very dilated with the possibility of immediate perforation, to place the stent in elective conditions after 24-72 hours in the right environment, with proper assistance and instrumentation. having corrected fluid-electrolyte and cardiopulmonary problems [5,6],

Risk factors for SEMS complications include complete obstruction, with sharp angulation of the large bowel above the recto sigmoid junction. The blind passage of the guidewire, can lead to the perforation of the large bowel wall which, above the obstruction, is thin, dilated, and partially ischemic. The location of the tumor is an important point to consider. Colorectal cancers, which present with obstruction, are more often located in the recto sigmoid junction. If the patient does not have major clinical problems, and the colon above the obstruction is not very dilated, surgical resection and primary anastomosis is a simple and straightforward

procedure which can be performed through a relatively small incision (preferring a low ligation of the inferior mesenteric artery) with short hospital stay and few complications. Being the colon not very dilated the operation can be deferred until the patient has been re equilibrated. Another important aspect to consider is the expertise in SEMS placement: the results of initial studies were disappointing for several reasons, including an initial unfamiliarity with the details of the procedure [7,8]: it is wiser to perform a diverting colostomy rather than to try to place a SEMS if the operator does not have enough experience.

In the clinical setting of an emergency operation, to perform a diverting stoma can be followed by complications including incomplete resolution of the obstruction, infection, difficulties to perform a subsequent resection. One could wonder if to perform a completely diverting stoma is not much different than to perform a segmental sigmoid resection.

The better results obtained after SEMS placement and diverting colostomy as a bridge to surgery in comparison to early resection might derive from the possibility to improve the general status of the patient, who in general comes to the emergency room in poor conditions, having symptoms for several weeks with significant weight loss, dehydration, electrolyte unbalance and worsening of possible pre existing pulmonary, renal and cardiologic problems. Thus, performing early segmental resection (associated with a proximal diverting stoma to be closed under local anesthesia few days later) for sigmoid obstructing cancers 2-3 days from admission (improving the general status of the patient) may be a valid choice in selected patients.

Thus, we may assert that the therapeutic options in patients with acute or subacute malignant colorectal obstruction, should be based on a careful analysis of the different risk factors. SEMS placement, surgical resection or simply diverting colostomy should be considered complementary techniques to be used according to the specific clinical and anatomic condition, and expertise of the involved medical team. In this scenario, a close collaboration among specialists in selecting the most appropriate operative procedure is essential and brings to better results [9,10]. These two excellent reports underline another point: the importance of screening for colorectal adenomas and cancers, which inevitably is still not well accepted by the general population.

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