New surgical approaches for the treatment of deep infiltrating endometriosis of the rectum

Sir,

We read with interest the article by Bridoux et al. (2011) concerning local excision of deeply infiltrating endometriosis (DIE) of the rectum. They describe the results of a pilot series of six patients treated by a new surgical technique of laparoscopic rectal mobilization and transanal full thickness excision of rectal endometriosis using a Contour® Transtar™ stapler. This stapling device was originally designed for rectocoele and internal rectal prolapse treatment (Lenisa et al., 2009). The technique is presented as a safe and less invasive alternative to conventional low anterior resection. Indeed, in contrast to endometrial infiltration of the sigmoid colon, for which resection is often necessary, rectal involvement is more prone to discoid excision: infiltration is extremely seldom circular and the muscular texture and the capacitance of the rectal ampulla enable local excision and transverse rectal closure.

The authors propose to use the Contour® Transtar™ stapler to facilitate a transanal local excision after full laparoscopic mobilization of the nodule. Although the technique is presented as a safer and less invasive alternative for a laparoscopic rectal resection, some important remarks can be made.

1. In this small series of six patients, inadvertent closure of the rectum in one patient necessitated conversion to rectal resection with coloanal J-pouch anastomosis. This certainly reflects a learning curve-effect of the use of the Contour® Transtar™ stapler and should be considered as a surgical failure. Furthermore, severe and even life-threatening complications have been described with the use of this technique in other indications (Pescatori and Gagliardi, 2008). In this pilot study, all patients had a defunctioning stoma (ileostomy/colostomy) and required secondary surgery for stoma reversal.

2. To allow a maximal rectal intussusception of the nodule being part of the rectum to allow endoluminal excision, a full mobilization of the rectum is required. Even under direct laparoscopic visualization, pathology revealed an incomplete resection in two patients (2/6). This raises concerns regarding the adequacy of the resection and the subsequent risk for recurrence.

3. Although the technique seems minimally invasive, functional consequences can be significant and difficult to handle. The technique involves extensive mobilization of the rectum leading to hindgut dysmotility (sigmoid insertion) secondary to autonomic nerve damage (Mollen et al., 2000). Moreover, a discoid excision of the rectum may lead to a significant reduction in rectal capacity and compliance. This can result in important changes of viscerosensation with (disabling) fecal urgencies and incontinence as a consequence. In most patients this will be transient but not in all (Ommer et al., 2010).

The proposed technique is an elegant adjunct to the armamentarium of the experienced laparoscopic surgeon dealing with DIE. However, all the aforementioned points should be taken into consideration when dealing with DIE, and especially so when a surgeon is faced with difficult decisions in a multidisciplinary approach.

References


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Reply: New surgical approaches for the treatment of deep infiltrating endometriosis of the rectum

Sir,

We thank Drs Wolthus and D’Hoore for their letter. Before December 2007, our department generally managed women with rectal endometriosis by performing segmental rectal resections, whereas we now perform three times more nodule excisions than resections, accompanied by a systematic recommendation of post-operative continuous contraceptive pill intake.

This choice is based on strong arguments: surgical morbidity appears to be higher in women managed by colorectal resection (Darai et al., 2005; Mereu et al., 2007; Slack et al., 2007), post-operative functional digestive symptoms are expected to be less satisfactory after rectal removal (Ret Davalos et al., 2007; Roman et al., 2010) and rectal resection does not prevent post-operative recurrences of pain (Vercellini et al., 2009).

First, we agree with the author’s comments on the learning curve and the risks connected with this new procedure and that it should be carried out by surgeons specialized in colorectal surgery and trained with the use of this stapling device.

The closure of the rectum during our first procedure for endometriosis occurred despite the fact that the procedure was carried out by a colorectal surgeon (J.J.T.) who is trained in the use of the Contour® Transtar™ stapler for the treatment of internal rectal prolapse (Lenisa et al., 2009).