

Letters to the Editor

To the Editor:

The recent article “Endometriosis lesions that compromise the rectum deeper than the inner muscularis layer have more than 40% of the circumference of the rectum affected by the disease” [1] is a nice observational research article, yet the conclusion that “a segmental resection of the bowel is recommended” is not supported by the data and is misleading.

First, it would not be surprising if larger nodules infiltrate deeper into the bowel wall, cause greater distortion of the bowel, and occupy a larger area of the bowel both in length and in circumference. Moreover, it is common knowledge—although the data are lacking—that the difficulty of surgery increases with the size of the nodule. Restricting the analysis to the depth of invasion as the only predictive parameter to decide about treatment is inadequate and might be wrong. It should at least be shown that depth of invasion is a better predictor than the mere size of the lesion. Moreover, other aspects such as lateral extension and attachment to the ischial spine are, in our experience, even more important predictors of surgical difficulty. That larger nodules have a higher probability to affect ureters and other organs also is not surprising. We, therefore, would suggest including in the analysis not only the depth of infiltration but also the size and localization of the nodule as a predictive factor for circumference involvement of the bowel. If—as we would expect—the size of the nodule is more than or as predictive as depth of invasion, then the value of the transrectal ultrasound should be revised [2].

Second, the conclusion that the morphology data on circumference extension confirm the recommendation of a bowel resection is unsupported. We recently reviewed the literature of bowel resection [3] showing unequivocally that the complication rate of rectum resections is much higher than of sigmoid resection, and that long-term complications amount to 30% bowel problems, 30% bladder problems, and up to 40% sexual problems such as anorgasmia. This is not surprising considering the orthosympathetic and parasympathetic innervation. These data on long-term complications of rectum resections can be criticized because most of the reports deal with surgery for rectal cancers, which might require more radical resections than for endometriosis. Until proven otherwise, however, it seems wise to take these data on long-term complications seriously and to avoid rectum resections whenever possible. A rectum resection for deep endometriosis, moreover, is rarely necessary [4]. In a consecutive series today of more than 1500 nodules (in preparation), we had to perform

only 3 rectum resections, all with large nodules of more than 4 cm in diameter. These were indicated only in the rare cases in which more than 50% of the bowel wall had to be resected and, of even more importance, in cases in which the length of the rectum defect was more than 5 to 6 cm, making a double-layer suture hazardous. With a recurrence rate of endometriosis of some 1% for discoid resection with a follow-up of more than 10 years it will indeed be difficult to prove superiority of a segmental resection of the rectum.

Third, the argument that the percentage of the bowel circumference involved should become an indication for segmental resection is not correct and at least unproven. The infiltration through the muscularis involving the mucosa indeed is only a small part around which the infiltration is much less, permitting an easy, complete, and nondangerous excision. Segmental resection seems, moreover, to carry a higher operative risk [5,6].

Fourth, that multifocality [7,8] of these nodules would be an argument for bowel resection also is not supported by data. That many of these nodules are irregular is something well known during excision. Yet, in our experience, they almost always represent extensions and irregular growth of one nodule. It would, moreover, be interesting to know to what extent this so-called multifocality is real or rather an artifact of microscopy.

In conclusion, with all the appreciation for a carefully performed study, we would like to ask the authors whether size is not an equal predictor of circumferential extension than depth of invasion, and whether the observed multifocality, suggesting metastasis, is not an artifact, the reality being an irregular nodule. Of most importance, we want to question the liberal use of rectum resection, given the high complication rates and the unproven superiority over discoid excision. We fully agree with the statement of the authors that a rectum resection is technically much easier and faster, but this seems a poor argument to advocate surgery with such a high complication rate.

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To the Editor:

We were honored to receive the comments made by Professor Koninckx and colleagues of the University of Leuven, Belgium, with respect to our recent publication [1] in the *Journal of Minimally Invasive Gynecology* entitled “Endometriosis Lesions that Compromise the Rectum Deeper than the Inner Muscularis Layer Have more than 40% of the Circumference of the Rectum Affected by the Disease.”

In our opinion, it was extremely important to show the relationship between the size and depth of the invasion of nodules affecting the bowel wall. Although it is certainly no surprise that larger nodules infiltrate to a greater depth, to our knowledge no data were yet published on the subject and, in addition, it clearly reveals that the disease does not spread superficially over the bowel wall but, instead, extends by infiltrating deeper from the serous layer into the mucous layer.

This fact does not alter the importance of the size of the lesion, but, rather, reinforces the notion that large nodules infiltrate the bowel wall in depth and extension. Our study introduces the concept that the endometriotic lesion encompasses a successively greater proportion of the circumference of the bowel wall in accordance with its size and, consequently, the depth of its invasion.

The proportion of the circumference of the bowel wall affected by the lesion is of obvious importance; in clinical practice, resection of nodules affecting, for example, 80% of the circumference of the bowel wall, would be rendered infeasible. If the patient is submitted to surgical treatment for this type of nodule and if the surgeon decides to completely resect the nodule, it will be difficult to close the remaining 20% of the bowel lumen. If the surgeon succeeds, he or she will probably cause bowel stenosis or leave a residual lesion.

With respect to the complication rates, Professor Koninckx and colleagues provide answers to this question. The data in the literature originate from different types of surgery from those carried out for the treatment of endometriosis, because in cases of cancer, the excision of the mesorectum is extensive and includes all the posterior and deep tissue. In endometriosis, because the disease affects the anterior wall of the rectum or sigmoid, posterior dissection is superficial and includes only the tissue required to obtain the plane for insertion of the linear stapler, leaving the nerve bundles intact in most cases.

In our experience, we have a rate of serious complications (fistula, anastomotic leakage, or bladder atonia) of around 1% and an index of multifocality of lesions of 40%. In addition, because the bowel lesions are often multifocal (42.2% in this sample), resecting various nodules in the same segment may lead to a much higher risk for the patient than performing a segmentary resection with mechanical anastomosis. We vehemently disagree with the statement regarding the existence of artefacts in the diagnosis of multiple lesions. The diagnosis of more than 1 lesion on the bowel wall is a simple histologic observation with no subjective interpretation, thereby leaving no space for discussion or specialist opinions.

Because a clear divergence exists in the experience of our groups, we await publication of the results referred to by the authors for posterior comments. We would, however, like to make one observation: even with the results presented, there is still lack of any randomized, controlled study relating the type of surgery with clinical improvement, complications, and recurrence during the short and long term. However, studies [2,3] have shown no doubt existed that a clear improvement is achieved in the quality of life of patients submitted to bowel resection for endometriosis.

Finally, 2 fundamental points should be addressed: which patient characteristics should determine the option for this type of surgical procedure and the concept of the recurrence of endometriosis. Our point of view is based on the indication of the optimal surgical treatment for patients with pelvic pain who do not respond to clinical treatment and who should be submitted to complete resection of endometriosis, thereby reducing the number of surgeries to which these patients are often submitted. In addition, the great advances introduced by imaging methods (transvaginal ultrasonography, endoscopic sonography, and magnetic resonance imaging) [4–6] make it possible to define what type of procedure should be carried out before surgery, permitting the selection of an appropriate multidisciplinary team and making it possible