

## References

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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

to discuss the benefits and disadvantages of each procedure with the patient. These diagnostic methods, albeit restricted to certain specialized centers, point toward a fundamental perspective for the decision on the optimal treatment of the disease and with respect to what constitutes recurrence and what constitutes persistence in the case of rectal endometriosis.

The second point reflects this concept, because it is imperative to differentiate recurrence from the persistence of endometriotic lesions resulting from incomplete surgeries. Based on these data, which are completely replicable, the surgeon, when proposing resection of a nodule in the case of lesions that may affect a large percentage of the circumference of the rectum, should make it clear to the patient that persistence of residual disease is likely.

To conclude, we would like to emphasize that it is not imperative to perform surgery for all patients with bowel endometriosis, but whenever surgery is indicated, we have an obligation to ensure that the procedure is complete.

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