

**Re: JSLs. 2017;21(1):e2016.00098. DOI: 10.4293/JSLs.2016.00098. Minimally Invasive Hysterectomy for Uteri Greater Than One Kilogram**

Dear Editor,

We read with interest the article by Ito et al,<sup>1</sup> in which the authors reported the largest case series of hysterectomies performed for extremely enlarged uteri via a minimally invasive approach, either laparoscopic or robot-assisted. With the only exception being the way the specimen was removed after hysterectomy, the surgical technique described by the authors (total laparoscopic hysterectomy) is similar to the one reported in a previous series by Uccella et al.<sup>2</sup> Although both authors demonstrated an acceptable rate of conversion to open surgery (5% in each series), in more than 50% of the cases described by Ito et al, the surgeon had to resort to minilaparotomy for uterine removal. On the contrary, most of the hysterectomies performed by the Italian group were followed by transvaginal morcellation, without the need for minilaparotomy in any of the cases.

It is certainly true that the U. S. Food and Drug Administration's safety warning could have played a central role in the decision to avoid the use of morcellation in Ito's series. Some evidence has suggested that laparoscopic hysterectomy with morcellation (vaginal or mechanical) results in increased risk of cancer dissemination, with worse survival outcomes among patients with unexpected uterine malignancies, compared with the abdominal removal of the uterus via minilaparotomy without morcellation. However, the current data are limited, and the specific risks associated with morcellation are not conclusive.

On the other hand, it has been largely demonstrated that the estimated risk of incisional hernias increases parallel to the extent of the surgical incision,<sup>3</sup> whereas this type of complication is uncommon when 5-mm trocars are used. As a consequence, it seems reasonable to hypothesize that, in a larger number of cases and during a long-term follow-up, the risk of incisional hernias (and, more in general, of incision-related complications) may be influenced by the route of specimen extraction.

We do believe that, in the absence of strong evidence to the contrary, the transvaginal route should be considered

for uterine morcellation after minimally invasive hysterectomy. The case series in which this technique was used<sup>2</sup> did not report any complication attributable to the transvaginal procedure. The performance of minilaparotomy may be indicated in the case of a narrow vagina.

#### References:

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#### Authors' Response

We would like to thank Dr. Jvan et al for the interesting discussion points that they have brought to our attention. Our study reports 56.8% of cases where tissue extraction was achieved through an umbilical or suprapubic minilaparotomy. Although we were mindful of the U. S. Food and Drug Administration's safety warning on power morcellation in regard to tissue spread, this factor was not the only one in the surgeons' choosing the route of tissue extraction. Rather, the mode (transvaginal, power, or minilaparotomy) was dictated by the shape and size of the uterus. We agree that vaginal extraction is the ideal route whenever possible, but also recognize that vaginal access, pelvic type, and width of the specimen all play a role in whether a large uterus is able to drop below the pelvic brim. In cases where vaginal access is severely limited, an alternative extraction point becomes necessary. This possibility was displayed by the slightly higher median uterine weight in patients who underwent minilaparotomy. The median uterine weight (range) in the 95 patients in

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our case series was 1326 (1000–4800) g, whereas the median weight (range) in the patients who had tissue extraction through a minilaparotomy was 1410 (1010–4800) g. In addition, 28 patients underwent supracervical hysterectomy and were automatically precluded from having transvaginal tissue extraction.

Currently, we use the umbilicus as our secondary extraction point for hysterectomy and as our primary extraction point for laparoscopic myomectomy. The incision mimics the single-port approach with a 2.5-cm fascial incision and is easily hidden. We acknowledge the slightly elevated hernia risk compared to a 5-mm port site, but our patients maintain all the benefits of minimally invasive surgery, including same-day discharge, minimal narcotic usage, rapid return to activities of daily living, and excellent cosmesis.

We agree that the rate of incisional hernias would be an important variable to follow in our patients. Although we do not have any outcome data, we are confident that our incisional hernia rate after use of this approach to tissue extraction (for both very large uteri and fibroids after

laparoscopic myomectomy) are lower than the published rates of vaginal cuff dehiscence after total laparoscopic hysterectomy.<sup>1</sup>

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