P.R. KONINCKX^{1,2,3,4,5}, A. USSIA⁶, S. GORDTS⁷

¹Latifa Hospital, Dpt OBGYN, Dubai, United Arab Emirates; ²Prof Emeritus OBGYN, KU Leuven, Belgium; ³University of Oxford and Hon Consultant, UK; ⁴University Cattolica, Roma, Italy; ⁵Moscow State University, Russia; ⁶Consultant Università Cattolica, Dpt OBGYN, Roma, Italy; ⁷Life Expert Centre, Leuven, Belgium.

Correspondence at: Philippe R. Koninckx, Vuilenbos 2, 3360 Bierbeek. E-mail: Pkoninckx@gmail.com

Sir,

Your article 'Endometrial preservation during resection of type II and type III submucosal fibroids' (Vorona and Saridogan, 2022) and the discussion on the healing of the endometrium, was read with interest. However, hysteroscopic resection of type II or type III fibroids will also incise or resect the junctional zone (JZ). Checking Pubmed for (hysteroscopy OR myoma) AND (JZ or junctional zone) not a single article was found discussing the trauma and the healing of the JZ following hysteroscopic myomectomy. Only one article studied the healing of the myometrium after abdominal myomectomy without mentioning the JZ (Tsuji et al., 2006). Abdominal myomectomy of large myomas decreases uterine contractility, which was suggested to improve fertility (Yoshino et al., 2012).

The JZ, or archimetra, is different from the myometrium as seen on MRI and ultrasound imaging. The JZ, Müllerian in origin, is responsible for peristaltic concentric uterine contractions (Leyendecker et al., 2022). The JZ plays a major role during placentation (Koninckx et al., 2018) and in the development of adenomyosis. High intrauterine pressures causing severe dysmenorrhoea were explained by excessive contractility of the stratum vasculare of the neometra (Leyendecker et al., 2022).

Considering the importance of the JZ in reproduction and the intimate relationship with the endometrium and uterine contractility, we were wondering whether you could discuss the repair of the junctional zone following hysteroscopic myomectomy and the importance of reducing the trauma. Besides the scientific interest, a hysteroscopic linear incision during hysteroscopy could eventually be considered as a treatment of dysmenorrhoea and eventually as a prevention of endometriosis.

References

- Koninckx PR, Ussia A, Zupi E et al. Association of Endometriosis and Adenomyosis: Vast Literature but Scant Conclusive Data. J Minim Invasive Gynecol. 2018;25:745-8.
- Leyendecker G, Wildt L, Laschke MW et al. Archimetrosis: the evolution of a disease and its extant presentation : Pathogenesis and pathophysiology of archimetrosis (uterine adenomyosis and endometriosis). Arch Gynecol Obstet. 2022.
- Tsuji S, Takahashi K, Imaoka I et al. MRI evaluation of the uterine structure after myomectomy. Gynecol Obstet Invest. 2006;61:106-10.
- Vorona G, Saridogan E. Endometrial preservation during resection of type II and type III submucosal fibroids. Facts Views Vis Obgyn. 2022;14:283-5.
- Yoshino O, Nishii O, Osuga Y et al. Myomectomy decreases abnormal uterine peristalsis and increases pregnancy rate. J Minim Invasive Gynecol. 2012;19:63-7.

doi.org/10.52054/FVVO.14.4.052