Predicting the recurrence of endometrial polyps: a commentary

Endometrial polyps are a common gynecologic pathology, with an incidence of up to 24%–41% in women with abnormal uterine bleeding and 10% of asymptomatic women, depending on the population studied (1). They can range in size from millimeters to centimeters, and can be single or multiple. In reproductive aged women, polyps can contribute to infertility and lower implantation and pregnancy rates in the setting of in vitro fertilization (2). Hysteroscopic resection is a relatively safe and simple procedure which effectively removes polyps; however, endometrial polyps can recur. Studies have suggested recurrence rates of up to 46%, and therefore it is important to attempt to identify risk factors associated with recurrence (3, 4).

The present study by Gu et al. (5) compares polyp recurrence in women with a low versus high number of endometrial polyps diagnosed and removed during hysteroscopic surgery. For this study, the authors used ≥ 6 as the high polyp number group and 1 as the low polyp number group, and prospectively followed patients for 1 year following initial surgery with transvaginal ultrasound at 3, 6, 9, and 12 months following initial surgery. The number for the high and low polyp group were chosen based on the highest and lowest quartile polyp number from their hospital. This study found that reproductive aged women with a high number of polyps had a higher chance of polyp recurrence, 45.5% versus 13.4%. After adjusting for other factors, multivariate analysis showed that a high number of endometrial polyps, endometriosis and history of past polypectomy were significant predictors of polyp recurrence (5).

This is an important study in that it is one of the first studies to prospectively investigate risk factors associated with postoperative polyp recurrence. It suggests that women with a high number of polyps may be a distinct subtype, and that they may arise from a different pathophysiology compared to garden-variety single polyps. This study suggests that women diagnosed with multiple polyps should be counseled about the high chance of recurrence, and be closely monitored for recurrence, especially if pregnancy is desired. It also suggests that molecular studies should be done that separate single from multiple polyps to further define the molecular footprints associated with these pathologies, which may have very different etiologies.

The main strength of this study is the relatively large number of patients who were prospectively followed and who were all operated on by the same physician, eliminating any biases associated with retrospective studies or differences in operating techniques. The main weakness is that recurrence was based on transvaginal ultrasound, and not on the gold standard repeat hysteroscopy (although, as the authors mention, this would be very invasive and costly). Also, there were patients lost to follow up. There is also the question of how to counsel patients in which 2-5 polyps were found, since this group was not specifically examined.

In conclusion, when operating on women with endometrial polyps, surgeons should take note of how many polyps are being removed. When multiple polyps are found, women should be counseled to the higher risk of recurrence and therefore followed more closely.

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