

## Radiologic and surgical demonstration of uterine polyposis

Aimee S. Chang, M.D., Jerald Goldstein, M.D., Kelle H. Moley, M.D., Randall R. Odem, M.D., and Michael H. Dahan, M.D.

Department of Reproductive Endocrinology and Infertility, Washington University School of Medicine, St. Louis, Missouri

We describe a rare case of uterine polyposis that was visualized by sonohysterogram, hysterosalpingogram, and hysteroscopy. (*Fertil Steril*® 2005;84:1742–3. ©2005 by American Society for Reproductive Medicine.)

Uterine polyposis consisting of a large number of concomitant endometrial polyps is rare with a PubMed search identifying 3 English-language cases between January 1955 and February 2004. One case was associated with tamoxifen use (1) and one with multi-organ adenomas (2), and the third described endometrial polyposis without identifiable risks and presented hysterosalpingogram visualization of these lesions (3). This is the first report to correlate hysterosalpingogram findings with sonohysterogram and hysteroscopic pictures.

### CASE REPORT

A 27-year-old G0 woman presented with infertility for 4 years. She had regular ovulatory heavy menses, every 28 to 30 days, lasting for 6–7 days, with premenstrual molimina. Her past medical history was remarkable only for obesity (body mass index 32.1). Examination was unremarkable; specifically, no masses or adenomas were palpated. As part of her initial infertility work-up, she had a hysterosalpingogram which displayed multiple endometrial filling defects (Fig. 1) and bilateral distal tubal disease (not shown). These defects were interpreted to be endometrial hyperplasia or submucosal fibroids. Sonohysterography performed to further evaluate these abnormalities revealed multiple polyps (Fig. 2). Office endometrial biopsy revealed secretory endometrium consistent with her ovulatory status. To thoroughly exclude the possibility of malignancy a hysteroscopy was performed which visualized numerous polypoid masses (Fig. 3). Initially the hysteroscopic scissor was used to remove several polyps, but given the large number of lesions it was elected to continue blindly with the polyp forceps with intermittent hysteroscopic visualization to direct this procedure. Pathology revealed 38 benign uterine polyps, the largest being 2

Received June 10, 2004; revised and accepted July 14, 2005.  
Reprint requests: Michael Dahan, M.D., Reproductive Endocrinology and Infertility, 300 Pasteur Dr., Room A370, Stanford, California 94305-5317 (FAX: 650-723-7737; E-mail: dahanhaim@hotmail.com).

### FIGURE 1

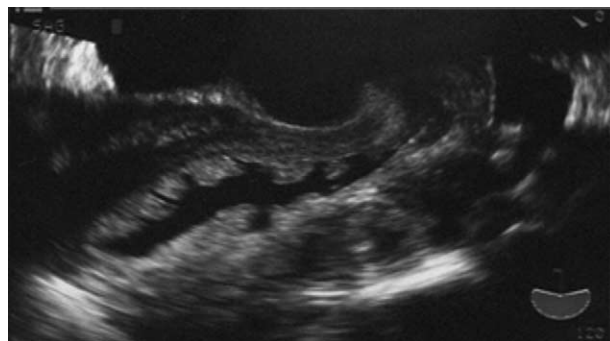
Hysterosalpingogram image demonstrating multiple uterine filling defects.



Chang. *Imaging of uterine polyposis. Fertil Steril* 2005.

### FIGURE 2

Sonohystogram image suspicious for multiple uterine polyps.



Chang. *Imaging of uterine polyposis. Fertil Steril* 2005.

## FIGURE 3

This image was obtained upon hysteroscopic entry. Multiple polyps of varying sizes were visualized.



Chang. Imaging of uterine polyposis. *Fertil Steril* 2005.

cm in length. The specimens had a polypoid structure with a fibrous core containing thick-walled blood vessels. Atypia was not present. After the procedure her menses became lighter and shorter, lasting for 5 days. She could not afford fertility treatment.

### DISCUSSION

The question of how endometrial polyps affect fertility remains unanswered. There have been hypotheses that polyps may disturb the endometrial environment by bleeding or present an abnormal site for implantation. A PubMed search using the key words polyps and fertility located only 2 relevant English-language studies between January 1955 and February 2004. One retrospective study evaluated a small group of infertile women that underwent polypectomy and showed that 78.1% subsequently conceived (4), and a second study found a pregnancy rate of approximately 80% after polypectomy (5). Neither of these studies had an adequate control population to assess what percentage of patients would conceive without treatment. In fact, no randomized control trials on the effect of polypectomy on fertility could be located. Since removal of polyps greater than 1 cm in greatest diameter is a routine part of treatment prior to infertility management, the benefit of polypectomy in promoting conception needs further study.

Endometrial polyps are rarely cancerous, with malignant lesions affecting only 0.6% (5). However, in tamoxifen-treated patients, numerous studies observed a higher incidence of malignant changes (3%–10.7%) (1). Based on the 4 cases in the English-language literature, there is no evidence that patients with uterine polyposis are more likely to have malignant changes of these polyps. However, it is possible that whatever mechanism predisposes to the development of these polyps may over time predispose these patients to an increased risk of endometrial carcinoma.

### REFERENCES

1. Schlesinger C, Silverburg, SG. Tamoxifen-associated polyps (basalomas) arising in multiple endometriotic foci: a case report and a review of the literature. *Gynecol Oncol* 1999;73:305–11.
2. Fujikawa M, Okamura K, Sato K, Mizokami T, Tamaki K, Yanagda T, Fujishima M. Familial isolated hyperparathyroidism due to multiple adenomas associated with ossifying jaw fibroma and multiple uterine adenomyomatous polyps. *Eur J Endocrinol* 1998;138:557–61.
3. Ernst R, Krysiexicz S. Hystero-graphic demonstration of multiple endometrial polyps: case report. *Urol Radiol* 1990;12:118–9.
4. Varasteh NN, Neuwirth RS, Levin B, Keltz MD. Pregnancy rates after hysteroscopic polypectomy and myomectomy in infertile women. *Obstet Gynecol* 1999;94:168–171.
5. Spiewankiewicz B, Stelmachow J, Sawicki W, Cendrowski K, Wypych P, Swiderska K. The effectiveness of hysteroscopic polypectomy in cases of female infertility. *Clin Exp Obstet Gynecol* 2003;30:23–5.