

Clinical Report**TRIAL STUDY ON ENDOMETRIAL POLYPECTOMY BY NEWLY DEVELOPED SNARE UNDER FLEXIBLE HYSTEROSCOPY**

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Introduction

Endometrial polyps is a cause of abnormal uterine bleeding and can be a cause of infertility. Usually it was discovered through the hysterosalpingogram with the finding of filling defect. Recently due to the prevalence of hysteroscopy, it was diagnosed easier⁵⁾⁶⁾. The management of endometrial polyps has been to perform the operation of dilatation and curettage (D & C). Anesthesia and cervical dilation has been also required. Furthermore this manipulation is not always successful. The polyps may still remain after D & C⁷⁾. Since there has been few attempt to improve this procedure, we introduced our method by using a newly developed snare through a flexible operating hysteroscope to remove the intrauterine polyps without anesthesia and cervical dilation in our clinics. Post-operative courses as well as pathological findings were also investigated.

Subjects and Methods

From September 1990 to April 1991, fourteen patients aged from 29 to 60 were diagnosed as endometrial polyps by using a flexible diagnostic hysteroscope (3.7mm outer diameter)²⁾ in our clinics without anesthesia and cervical dilation. After the diagnosis these patients underwent hysteroscopic removal of endometrial polyps. The procedures were described as below. A new flexible operating hysteroscope (Olympus, HYF type 1T) as shown in Fig. 1 was used just after the diagnostic fiberoptic hysteroscopy. Its specifications were shown as Table 1. The distending medium which we used for both diagnostic and operative hysteroscopy was 10% glucose in water⁴⁾. Neither anesthe-

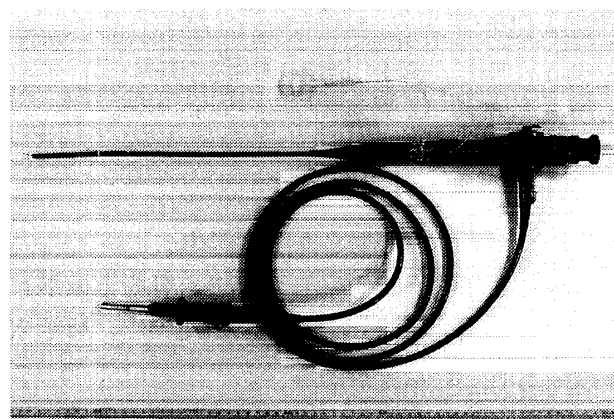


Fig. 1. Flexible operating hysteroscope with a snare protruding from the distal end.

Table 1. Specifications of the new flexible operating hysteroscope

Optical system	Field of view Direction of view Depth of field	120° 0°(forward viewing) 2~50mm
Distal end	Outer diameter	4.5mm
Insertion tube	Outer diameter	4.9mm
Channel	Inner diameter	2.2mm
Bending section	Range of tip bending	up 120°, down 120°
Working length		290mm
Total length		590mm

sia nor cervical dilation was preformed for these operative procedures. A newly developed snare (Fig. 2) was inserted into the operating channel and the tip of the snare was drawn within the channel for easy insertion of the scope. Under direct vision the scope was introduced through the cervical canal into the uterine cavity to find out the place of

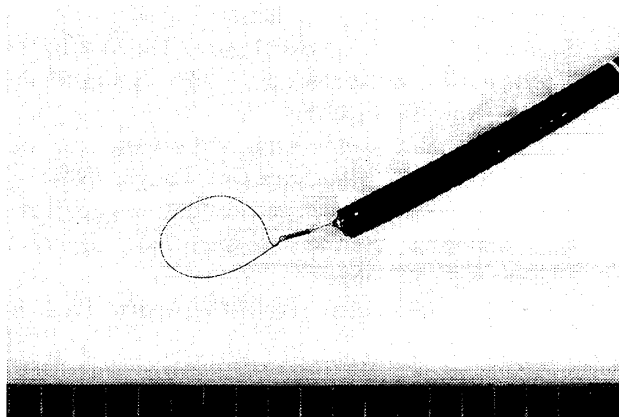


Fig. 2. Close up of the opened snare extending beyond the end of the flexible hysteroscope.

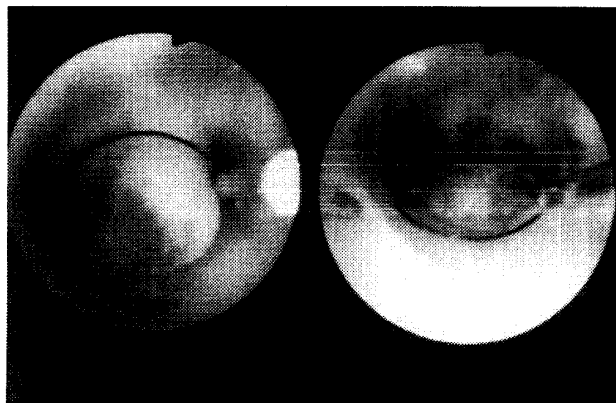


Fig. 3. The loop was opened to hang the pedicle of the polyp.

the endometrial polyps. Then the snare was advanced to the area of the polyp. The loop was opened to hang the polyp. By moving the tip of the scope and advancing the snare, the loop was placed to the pedicle of the polyp as shown in Fig. 3. Then pulling the loop to make it hang the pedicle tightly, the scope was removed and the polyp was extracted simultaneously. The scope was again re-introduced into the uterine cavity to confirm the complete removal of the endometrial polyps or continue to remove another.

Results

The indications for diagnostic hysteroscopy of these fourteen patients were premenopausal abnormal uterine bleeding (10 patients), postmenopausal abnormal uterine bleeding (2 patients), primary infertility (1 patient) and uterine myoma (1 patient). The size of the largest polyp which we removed is

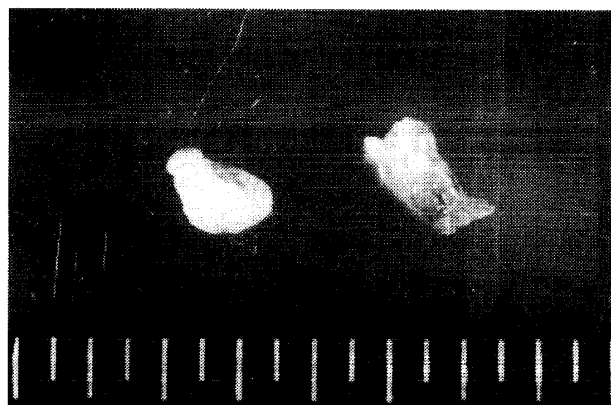


Fig. 4. Specimen of the removed endometrial polyps.

1.8×0.5×0.5cm as shown in Fig. 4. The pathologic diagnosis was endometrial polyps in 10 cases and cystic endometrial hyperplasia in 4 cases. After the procedures subsequent bleeding was encountered for three to four days in some cases but could be neglected. There were no other complications in any patient.

Discussion

For these 4 years, a total of 2,138 cases of diagnostic fiberoptic hysteroscopy were performed in our hospital¹⁾. The presence of endometrial polyps was 13.2% in cases of premenopausal abnormal uterine bleeding, 7.9% in cases of postmenopausal abnormal uterine bleeding, and 9.2% in infertile women. Although we used to apply either a biopsy forceps or a grasping forceps for removal of the polyps³⁾ after the diagnosis, it was difficult to complete it, requesting further cervical dilation and curratage (D & C). However D & C required anesthesia and the polyps might remain even by this method. Using the flexible characteristics of the tip of the fiberscope, our snare can be placed at the appropriate position to hang the pedicle and to remove the polyps completely under direct vision without anesthesia or cervical dilation. With this experience, we conclude that removal of endometrial polyps with a flexible hysteroscope and a snare can be an effective method used easily in the office and the operating room alike.

References

1. Lin, B.L. and Iwata, Y.: Experience of hysteroscopy with 2138 patients. *Obotet*

- Gynecol. Practice., 39 : 1391, 1990.
2. *Lin, B.L., Iwata, Y., Liu, K.H. and Valle, R.F. :* The Fujinon diagnostic fiberoptic hysteroscope, Experience with 1503 patients. J. Reprod. Med., 35 : 685, 1990.
 3. *Lin, B.L., Iwata, Y., Liu, K.H. and Valle, R.F. :* Clinical applications of a new Fujinon operating fiberoptic hysteroscope. J. Gynecol. Surg., 6 : 81, 1990.
 4. *Lin, B.L., Miyamoto, N., Aoki, R. and Iwata, Y. :* Transcervical resection of submucous myoma. Acta Obst. Gynaec. Jpn., 38 : 1647, 1986.
 5. *Sugimoto, O. :* Endometrial polyp. Diagnostic and Therapeutic Hysteroscopy, 109. Igaku-Shoin, Tokyo, New York, 1978.
 6. *Takashima, E. :* Color Atlas of Cervicoscopy and Hysteroscopy, 30. Kanehara Co., Tokyo, 1989.
 7. *Valle, R.F. :* Hysteroscopic evaluation of patients with abnormal uterine bleeding. Surg. Gynecol. Obstet., 153 : 521, 1981.
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