Removal of endometrial polyps by use of grasping forceps and curettage after diagnostic hysteroscopy

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Summary

Purpose of investigation: To determine the therapeutic efficacy of the use of gall stone forceps and curettage in endometrial polyps removal, after their detection with diagnostic hysteroscopy.

Methods: From 1997 to 2001, we conducted a prospective study in 53 patients who presented at our department for menstrual disorders, infertility problems or postmenopausal bleeding and in whom endometrial polyps were detected by hysteroscopy. All patients received general anesthesia and after hysteroscopic detection of the polyps' location, their removal was attempted by use of Desjardins gall stone forceps and curettage. Immediately after the procedure, a second hysteroscopy was performed in order to detect remnants of the polyps.

Results: Fifty patients presented with only one polyp, two with two polyps and one with three polyps. The mean diameter of the polyps ranged from 0.5 to 3 cm. The hysteroscopic appearance of all polyps was not suggestive of malignancy. During the second hysteroscopy we found parts or whole polyps in five and two cases, respectively, accounting for a therapeutic success of 86.8%. The hospitalization time for all patients was 24 hours and occurred no intraoperative or postoperative complications.

Conclusion: Our method seems to be safe, with low cost and sufficient therapeutic outcome and could be used in hospitals with availability of diagnostic hysteroscopy only.

Key words: Endometrial polyps; Diagnostic hysteroscopy; Desjardins gall stone forceps; Curettage.

Introduction

Endometrial polyps are a common condition encountered in all age groups. In the reproductive age group they can be associated with menstrual disorders with a prevalence of 7.3% [1] and infertility problems with a reported prevalence of 6-44% [2, 3]. After menopause they may be a significant cause of bleeding, with rates of detection between 10-21% [4]. It has been reported that irrespectively of age the incidence of endometrial polyps ranges from 3.6% to 23.8%. The detection of endometrial polyps may be accomplished by use of transvaginal sonography, sonohysterography and hysteroscopy, with the latter method showing better results and especially diagnostic advantages concerning the location and morphology of the polyp. The removal of the endometrial polyps should be curative with no recurrences and this effort cannot always be accomplished by dilatation and curettage (D&C). Furthermore, hysteroscopy as a therapeutic approach has been used not only as an adjunctive to curettage but also as an alternative method [5].

The aim of the present study was to determine the therapeutic efficacy of the use of gall stone forceps and curettage in the removal of endometrial polyps, after their detection with diagnostic hysteroscopy.

Material and Methods

From 1997 to 2001, we conducted a prospective study in 53 patients who presented at our department for menstrual disorders, infertility problems or postmenopausal bleeding and in whom endometrial polyps were detected by office hysteroscopy. The age of the patients ranged from 25 to 64 years (mean 48.2 years). Thirty-six women had menstrual disorders, two had menstrual disorders and infertility and 15 had postmenopausal bleeding. Two from the 15 postmenopausal women were receiving hormonal replacement therapy. All patients received general anesthesia and after hysteroscopic detection of the polyps' location, their removal was attempted by use of gall stone forceps and curettage. Immediately after the procedure, a second hysteroscopy was performed in order to detect remnants of the polyps. In cases where parts or whole polyps remained, complete therapy was ensured by repeated use of gall stone forceps and curettage, or use of a resectoscope. In premenopausal patients, the procedure was performed in the early proliferative phase.

Hysteroscopy was performed with a 5-mm continuous flow hysteroscope (Wolf GmbH, Knittlingen, Germany). Uterine distension was achieved by Lactated Ringer's solution, which was hanging 1 m above the patient in order to provide sufficient hydrostatic pressure. The grasping forceps we used were the Desjardins gall stone forceps (Figure 1). A 9-mm resectoscope with wire loop electrode was used and uterine distention was provided by 1.5% glycine solution, which was supplied by use of an electronic device (max flow 400 ml/min, max endometrial pressure 100-125 mmHg).

Intraoperative antibiotic prophylaxis was administered in all cases (ampicillin 1 g IV). All materials obtained by the procedure of our study protocol were sent for histologic examination. The hospitalization time for all patients was 24 hours.

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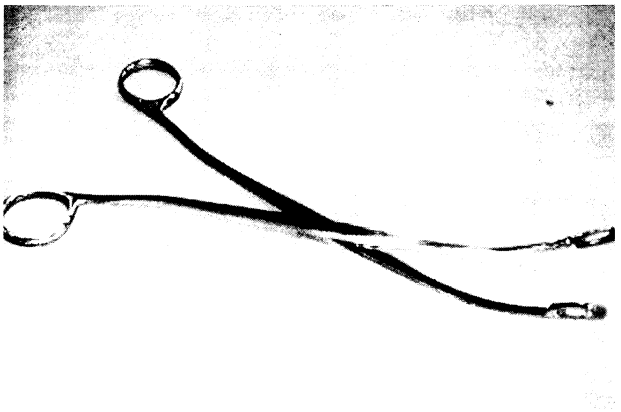

Figure 1. — Desjardins gall stone forceps.

Results

Fifty patients presented with only one polyp, two with two polyps and one with three polyps. The mean diameter of the polyps ranged from 0.5 to 3 cm (mean 1.2 cm). The hysteroscopic appearance of all polyps was not suggestive of malignancy. The majority of diagnostic hysteroscopies were accomplished without problems, but in two cases mild dilatation of the cervix was required. In all cases we had satisfactory inspection of the whole endometrial cavity, and no intraoperative or postoperative complications occurred. During the second hysteroscopy, which was performed in order to evaluate the efficacy of the combined use of gall stone forceps and curettage, we found parts (< 0.5 cm) or whole polyps (< 0.7 cm) in five (9.4%) and two (3.8%) cases, respectively. Therefore, the therapeutic efficacy of this method is 86.8% (46/53). In the seven cases with polyp remnants, we attempted their complete removal with repeated use of gall stone forceps and curettage but it was inefficient in five, and finally a resectoscope provided complete therapy. Histologic examination showed benign polyps in 52 patients and in one polyp complex hyperplasia with atypia was diagnosed. The follow-up data (office hysteroscopy) after six months were available in 27 (51%) of our patients, because 21 were lost, five had undergone hysterectomy for endometrial complex hyperplasia with atypia (2), recurrent metrorrhagia (1) and fibroids (2). From the hysteroscopic findings of the 6-month follow-up and the surgical specimens of the five hysterectomies it was evident that no endometrial polyps were found. However, in one of the seven cases where polyp remnants were found after the second hysteroscopy and repeated procedure had provided complete therapy, we found iatrogenic synechiae.

Discussion

Dilatation and curettage is one of the methods used for detection of endometrial pathology. Although rather invasive, "blind" D&C has been questioned as the "gold standard" for endometrial diagnosis, as less than half the endometrium is usually sampled during this procedure [6, 7]. Especially in the case of endometrial polyps, difficulty in their detection has been reported [8]. Other studies report that hysteroscopy compared to D&C improves the detection rate of endometrial polyps [5, 9, 10]. It has been suggested that a blind D&C should not be considered as an optimal diagnostic tool, because hysteroscopy can direct a biopsy to a suspicious lesion of the uterus [11]. Regarding their extraction, "blind" D&C has been proven ineffective [5, 8].

From our results it is evident that the combined use of gall stone forceps and D&C, after detection of endometrial polyps with hysteroscopy, is therapeutic in 86.8% (46/53) of cases. The failure rate of our procedure (7/53, 13.2%) in our series is probably related to the location (near cornuae), nature and small size of the endometrial polyps. The risk of leaving a lesion in situ after curettage is particularly high in the case of a cornual location [12].

Comparing our results with those from other authors, where the blind D&C adjuncted by grasping forceps revealed a 41% complete extraction rate of endometrial polyps [5], it is evident that knowledge of the hysteroscopic appearance of the endometrium significantly improves the therapeutic outcome of these combined procedures.

It is also important to report that no complications were associated with the procedure and all of our cases were hospitalized for 24 hours.

In our series, although follow-up was available in half of our patients, there were no recurrences after six months. However, endometrial resection is reported to be the optimal method in preventing recurrence of tamoxifen-associated endometrial polyps [13]. Other authors regard hysteroscopic polypectomy as the optimal therapy for prevention of persistence or recurrence of endometrial polyps when the removal of the endometrial basalis in the endometrial polyp origin area is achieved [14].

Conclusion

Conclusively, our method seems to be safe, with low cost and sufficient therapeutic outcome and could be used in hospitals with availability of diagnostic hysteroscopy only.

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