Conservative management of retained trophoblastic tissue and placental polyp with diagnostic ambulatory hysteroscopy

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ABSTRACT
Objective: To analyse the results of our conservative management of retained trophoblastic tissue and placental polyp with diagnostic ambulatory hysteroscopy and to describe our experience and guidelines.

Study design: Descriptive retrospective study. Eighty-four women with suspected retained trophoblastic tissue after pregnancy underwent hysteroscopic examination and extraction of all residual tissue in the office under direct visualization of the uterine cavity, without anaesthesia or cervical dilatation.

Results: Hysteroscopic examination was tolerated by all but one patient. In 82 cases (97.4%), the diagnosis after hysteroscopic examination was placental polyp or retained trophoblastic tissue. This diagnosis was histologically confirmed in 79 cases (94.7%). In 43.6% (36) of the cases, complete evacuation of the uterine cavity was achieved during a single hysteroscopic examination. The only complication after hysteroscopy was one case of major vaginal bleeding requiring curettage.

Conclusions: Diagnostic-operative ambulatory hysteroscopy is a suitable alternative to blind curettage in the management of retained trophoblastic tissue. This technique can be performed in the office without anaesthesia and with a low rate of complications.

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1. Introduction

In everyday clinical practice, it is not uncommon for patients to suffer from major vaginal bleeding, abdominal pain, or fever a few days after vaginal delivery, caesarean section, or curettage following abortion. In such cases, the existence of residual trophoblastic tissue may be suspected [1]. Diagnosis is usually made based on symptoms, sonographic imaging, and sonohysterography, aided by color Doppler, which may reveal vascularised or unvascularised intrauterine echogenic masses [2,3]. In most cases, irregularly distributed trophoblastic tissue is found; less frequently, a polypoid or pedunculated mass of placental tissue (placental polyp) is found. In such cases, evacuation of the retained tissue is necessary to stop bleeding, resolve the infection, and prevent long-term complications such as uterine adhesions and infertility.

Management has traditionally been dilatation and curettage, often guided by sonography. However, sometimes bleeding or symptoms are persistent, and tissue evacuation is incomplete [3,4]. The aim of this study was to analyse the results of our conservative management of placental polyps and residual trophoblastic tissue using diagnostic ambulatory hysteroscopy and to describe our experience and guidelines.

2. Materials and methods

A descriptive retrospective study was performed between January 2001 and March 2008. We included all patients referred to our service with a diagnosis of suspected retained trophoblastic tissue or placental polyp after abortion, vaginal delivery, or caesarean section. Patients with symptoms suggestive of retained tissue underwent vaginal sonography with color Doppler.

The presenting symptoms included vaginal bleeding and/or fever. Expectant management was proposed in asymptomatic patients with sonographic suspicion of retained residual trophoblastic tissue. Only patients without spontaneous resolution after expectant conduct (persistence of sonographic imaging in consecutive controls and/or vaginal bleeding or fever appearance) were referred to our service.

Therefore the selection criteria for hysteroscopy in patients with suspected retained trophoblastic tissue or placental polyp were: symptomatic women with abnormal vaginal bleeding or fever (major bleeding was excluded) and expectant conduct failure.

Fig. 1 shows the guideline applied for the diagnosis and ambulatory management of placental polyps. Hysteroscopy was performed using a 5.5 mm diagnostic continuous-flow hysteroscope, with a 5-French external sheath for operating instruments (Karl Storz®, Tuttingen, Germany). The uterine cavity was distended with physiological solution and irrigated using an
electronic irrigation pump (Hysteromat, Karl Storz, Tuttlingen, Germany). Examination was performed as an office procedure, without anaesthesia or cervical dilatation. After complete examination of the uterine cavity, the suspected residual tissue was identified and removed with hysteroscopic biopsy forceps under direct visualization of the uterine cavity (Fig. 2). All the extracted tissue was sent for histological examination. If all of the retained tissue was removed, the procedure was terminated directly after histological confirmation of residual trophoblastic tissue (Fig. 3). When it was not possible to remove all the material during the first hysteroscopic examination, the patient began an oral regimen of estrogens and progestin to speed the proliferation of the intact endometrium, and a new examination was performed 1 month later in order to verify whether or not the tissue had been removed and, in the latter case, to attempt total removal.
3. Results

Eighty-four women were referred to the office with a diagnosis of suspected retained trophoblastic tissue or placental polyp after vaginal delivery, abortion, or caesarean section. The median age was 32 years (range 15–41). For 28 women (33.3%), this was the first pregnancy. In 47 cases (56%), diagnosis was made after abortion, in 28 cases (33%) after vaginal delivery, and in 9 cases (11%) after caesarean section. The mean gestational age was 10 weeks (range 6–21) for cases of abortion and 37 weeks (range 32–41) for vaginal deliveries and caesarean sections. The median interval between termination of pregnancy and symptoms was 35 days (range 2–105).

The main reasons for referral were vaginal bleeding (72%, 60 cases) and sonography suspect persistence after expectant management (15%, 15 cases). Four patients were admitted due to fever. The procedure was made under antibiotic treatment. One woman diagnosed with placenta accreta needed four hysteroscopy, and resulted in a normal uterine cavity. In 21 cases (25.6%), a second hysteroscopy was performed 1 month later, complete evacuation of the cavity. In these four cases, because the women were stable, conservative management was appropriate. Therefore, a hysteroscopic examination was performed about 7–13 days after the curettage.

Hysteroscopy was performed as first treatment in most patients (77%, 64 cases), while 20 women initially underwent curettage. One woman received three curettages and one woman received four, both were referred from other hospitals where the health problem could not be resolved using traditional methods.

The mean examination time was 12 min (range 8–20). In 82 cases (97.4%), the diagnosis after hysteroscopic examination was placental polyp (n = 30) or retained trophoblastic tissue (n = 54). Diagnosis was histologically confirmed in 79 cases (94.7%); in five cases the diagnosis was necrotic tissue.

Müllerian anomalies were found in eight cases (10.3%): six incomplete septate uteri and two unicorn uteri. These women were referred due to an abnormal ultrasound finding after a difficult curettage.

In two cases (5%), ambulatory treatment was not possible. One woman needed curettage after the hysteroscopy because of major vaginal bleeding. Another woman did not tolerate the examination, so it was performed under local anaesthesia with sedation. The examination was otherwise well tolerated by the women.

In 36 cases (43.6%), one hysteroscopic examination was sufficient for complete evacuation of the uterine cavity. In 13 cases (15.4%), a second hysteroscopy was performed 1 month later, and resulted in a normal uterine cavity. In 21 cases (25.6%), a second hysteroscopy was needed to achieve total evacuation of the tissue. For 13 patients (15.4%), three procedures were needed (one woman diagnosed with placenta accreta needed four hysteroscopies to resolve the problem). In 40 patients (47.4%), medical treatment with estrogens and progestin was initiated.

After the procedure, 30 women sought to conceive, and 24 (78.6%) were successful. Fifteen women had a full-term delivery (63.6%), four had an abortion (18.2%), and four are continuing pregnancy (18.2%). The average time to conception was 8.4 months (standard deviation, 7.1).

4. Comment

Extraction of retained trophoblastic tissue or placental polyp by hysteroscopy is easy to learn and a safe and effective alternative to blind curettage. Retained tissue can be removed by direct visualization of the uterine cavity. As a small-diameter hysteroscope is used, this technique can be performed in the office without anaesthesia or cervical dilatation and is well tolerated by the patient.

In these patients, tissue is usually attached to a small area of the endometrium. Using hysteroscopy, this area can be selectively targeted, without damaging the intact endometrium. In contrast, blind curettage damages the entire cavity, causing more surgical trauma, which can lead to uterine adhesions or uterine wall perforation.

Müllerian anomaly (10.3% of our patients) is sometimes responsible for residual trophoblastic tissue. This makes total removal of the tissue by blind curettage difficult. Full visualization of the uterine cavity by hysteroscopy permits diagnosis of the anomaly, determination of the exact location of the tissue, and extension and extraction of the tissue.

Other reports have described use of a resectoscope to localise trophoblastic tissue, followed by tissue extraction with a forceps or small curette [4–6]. We prefer to extract the tissue under direct visualization, using a hysteroscopic scissor or biopsy forceps; this avoids having to remove the hysteroscope from the uterine cavity and going in twice to check for complete removal of the tissue, and minimises the risk of infection.

Anaesthesia or cervical dilatation are not used while other studies use the resectoscope for extraction [6,7]. Other reports propose more aggressive management such as uterine artery embolization and hysteroscopic resection [8]. We prefer not to use current, in order to avoid surgical trauma and reduce inflammation and the possibility of adhesions [9–11].

Because hysteroscopic examination can be performed as an ambulatory procedure in the office and does not require use of an operating room, hospitalization, or anaesthesia, it is more profitable. In our experience, the management of retained trophoblastic tissue using diagnostic-operative ambulatory hysteroscopy is a suitable option after abortion, vaginal delivery, or caesarean section. This technique allows complete extraction with direct visualization of the retained tissue and has a low rate of complications. Among our patients, this approach has had a success rate of 94.8%.

5. Conclusions

Diagnostic-operative ambulatory hysteroscopy is a suitable alternative to blind curettage in the management of retained trophoblastic tissue. This technique can be performed in the office without anaesthesia and with a low rate of complications.

Appendix A. Supplementary data


References


