Pantaleoni first performed hysteroscopy in 1869, but it was not until the early 1970s that hysteroscopy became part of the gynecologist's armamentarium. The need for visual appraisal of the endocervix and endometrial cavity and technical advances in instrumentation increased the awareness of, and interest in, the advantages of hysteroscopic sterilization techniques.

During this time, it was widely documented that hysteroscopic sterilization techniques generally were done in office settings. However, diagnostic hysteroscopy was usually done along with dilatation and curettage (D&C) in the operating room. It was this "marriage" of performing diagnostic hysteroscopy with the D&C that obscured the ease and value of office hysteroscopy.

**Challenges to the D&C Procedure**

Until recently most gynecologists have relied on the D&C as both a therapeutic and diagnostic tool for abnormal uterine bleeding. This was despite the fact that there has been no published evidence indicating any therapeutic value gained from the procedure. Indeed, numerous articles have reported on the inaccuracies of this blind procedure, suggesting that D&C is not the best method for diagnosing endometrial pathology. The primary advantage of the D&C procedure is the ability to obtain a large tissue specimen for pathology. In contrast, hysteroscopy not only allows for providing tissue, but permits the gynecologist to choose selected areas for directed biopsy and identify polyps and submucous fibroids. The latter are routinely missed by blind procedures such as a D&C. However, in patients where an endometrial carcinoma or an ovulatory disorder may be the basis of bleeding, an endometrial biopsy (a procedure similar to a D&C) should always be considered prior to hysteroscopy. In these cases a positive diagnosis is meaningful. An endometrial biopsy, combined with a sonohysterogram, approaches the diagnostic accuracy of hysteroscopy and is frequently used in offices that are not able to perform hysteroscopy.

**Diagnostic Hysteroscopy — Indications**

The primary purpose of office hysteroscopy is to evaluate patients with abnormal uterine bleeding resistant to medical management or to perform a panoramic visualization of the uterine cavity. In addition, filling defects identified by ultrasound or hysterosalpingography can be confirmed or mapped by hysteroscopic visualization. Routine hysteroscopy in infertility cases has little benefit. Both pre- and postmenopausal patients are easily evaluated. A two-year review of my practice showed that 85% of all diagnostic hysteroscopies were accomplished in the office. The majority of the other 15% required concomitant laparoscopy, which was performed in a surgical setting. Only a few patients could not be done in the office, because they were too difficult to examine or were postmenopausal with a stenotic vagina.

**Office Setup**

The establishment of an office hysteroscopy unit need not be complicated and is described in Table 1. Hysteroscopy can be performed in a routine office exam room, although a room dedicated to procedures will facilitate its use. A video camera and monitor to display the findings to the patient is a very nice addition, but the hysteroscopic procedure is short enough so that direct visualization is quite easy for the physician. Historically, office hysteroscopy has been performed using carbon dioxide. Fluid distention systems such as the Disten-U-Flo (Figure 1) make use of low viscosity fluids and continuous flow hysteroscopes, alleviating the expense of a CO₂ insufflating unit and remaining functional in the presence of bleeding. The Disten-U-Flo System prevents bubbles associated with
carbon dioxide distention and facilitates selected biopsying since CO₂ frequently leaks from the rubber gasket on the forceps' channel and distention is lost.

Table 1
Minimal Equipment for Office Hysteroscopy

- 30 degree foroblique telescope
- 5.5 mm continuous flow diagnostic hysteroscopic sheath
- Light source and light cable
- DISTEN-U-FLO System or CO₂ insufflator
- Biopsy forceps
- Continuous suction aspiration equipment
- Cervical speculum
- Cervical tenaculum
- Ring forceps and ptosis
- Finger grip control syringe with needle extender and #21 needle
- 1% Lidocaine without epinephrine
- Small cervical dilator
- Sterile under the buttocks drape

Figure 1. DISTEN-U-FLO Fluid Management System with CIRCON AGM GY5 CFH Continuous Flow Hysteroscope.

Procedure

Patient preparation is one of the most important aspects for successful office hysteroscopy. The procedure is described to the patient prior to the examination and each step is explained during the procedure so that she is an active participant. This helps her understand the experience and relieves anxiety.

With the patient in dorsal lithotomy position, the cervix is visualized with the help of a speculum and washed with a prep solution. The hysteroscope, usually held in place by a tenaculum, is introduced under direct vision into the cervix, and a paracervical and intracervical block administered if necessary. Occasionally a small dilator may be used to probe the canal. The best view of the entire uterine cavity is obtained when the hysteroscope is placed at the junction of the lower uterine segment and upper cervical canal. The hysteroscope can then be advanced into the cavity for a closer view. The 30° lens is rotated to visualize the lateral walls' cornual areas.

Selected endometrial biopsies under direct vision are not necessary if the hysteroscopic view is normal or if, in cases of bleeding, the uterus is diffusely abnormal. However, if there is a specific area that should be evaluated as a separate specimen, or if the lesion itself is very small, a guided endometrial biopsy is performed. This is followed by a suction curettage to obtain a large amount of tissue for the pathologist. In this way, the hysteroscope is used to identify polyps and fibroids and to biopsy specific areas of abnormality.

The entire procedure takes less than 15 minutes. Generally, the most uncomfortable part of the process for the patient is the biopsy rather than the hysteroscopy itself.

Summary

Office hysteroscopy is advantageous both to the patient and the physician. For the patient it is little more than an extended office visit, usually providing a prompt diagnosis to a problem. Diagnostic office hysteroscopy is a safe procedure, with few significant complications, and the patient can resume normal activities immediately.

Savings in terms of physician time average one to two hours when compared to a hospital D&C. These savings occur primarily as a result of minimal office preparation, decreased turnover time
between procedures, no anesthesia, and no commute between the hospital and office. With the current focus on cost containment and patient demand for minimally invasive techniques, it is anticipated that there will be an increased motivation in the office-based gynecological practice to substitute a less expensive and more effective therapeutic procedure, such as office hysteroscopy, for the routine surgical D&C.

References:


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