Office Hysteroscopy: Diagnostic and Procedures

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Disclosures

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Learning Objectives

- Office hysteroscopy
  - At the conclusion of this presentation, the participant will be familiar with:
    - the most common indications for performing office hysteroscopy
    - Equipment needed to perform office hysteroscopy
    - Common office hysteroscopic procedures

Indications for Office Hysteroscopy

- **Evaluation of Abnormal Uterine Bleeding (AUB)**
- **Infertility evaluation**
- **Location of foreign bodies/lost IUD**
- **Identification of focal endometrial cancers**
- **Complications of pregnancy**
- **Cervical examination**

Indications for Office Hysteroscopy

- **Pre and post-surgical evaluation**
- **Evaluation of Post-menopausal bleeding**
- **Minor surgical procedures**
  - **Visual biopsy**
  - **Insertion of tubal occlusion device**
  - **Adhesiolysis**
  - **Polypectomy**

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Organic lesions and AUB

- Benign pelvic lesions
  - submucous myomata
  - intramural myomata (less common)
  - endometrial and endocervical polyps
  - adenomyosis

Cavity assessment exception

- Coagulopathies (15-20% of adolescents with excessive regular uterine bleeding)
  - primary hemostasis (formation of platelet plug)
  - secondary hemostasis (stabilization of platelet plug with fibrin deposition)
  - orderly dissolution of clot (fibrinolysis)

Evaluation of the Reproductive Tract

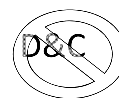
- Rule out malignancy
  - Endometrial biopsy (> 35 y/o)
  - Vaginal U/S if post menopausal
  - Pap smear +/- colposcopy and biopsy
  - Guiac
- Rule out infection
  - cervical cultures
  - EB to rule out chronic endometritis
- Rule out adenomyosis - MRI, ?hysteroscopy

Indications for Uterine Cavity Evaluation

- Premenopausal and ovulatory
- Premenopausal and anovulatory but fails hormonal therapy
- Postmenopausal bleeding off HRT
- Unexpected postmenopausal bleeding on HRT

Evaluation of the Uterine Cavity

- D&C
- Hysterosalpingogram
- Ultrasound
- Sonohysterography
- Office hysteroscopy



- Will miss up to 40% of focal lesions such as polyps and fibroids.
- Equal to Pipelle office biopsy for detecting diffuse endometrial carcinoma.
- Only indicated when office biopsy can not be obtained.

Loffer FD Obstet Gynecol 73(1): 16-20 1989

Vaginal Probe Ultrasound

- Useful for post menopausal bleeding < 5 mm endometrium risk of CA is <3%
  - Sensitivity and specificity 56% and 49% (hysteroscopy 100% and 50%)
  - PPV 83%, NPV -83%
- Can evaluate intramural and subserosal fibroids.
- Not helpful for focal endometrial lesions such as polyps, myomas or focal cancers.

Litta P et al. Maturitas 50:117-23, 2005

SIS Vs Hysteroscopy for cavity evaluation

- Similar time requirements
  - 296 sec for SIS
  - 255 sec for flexible OH
- Significantly lower pain via VAS with OH
- Patient tolerance
  - 78% preferred flexible OH
- No significant difference in detecting pathology

Senapita S et al. O-105 Fertil Steril Vol 90 Suppl 1, Sept 2008

Hysteroscopic findings in women with AUB

- Menstrual blood loss >60 ml
  - 64% with lesion at hysteroscopy (Fraser IS Am J Obstet Gynecol, 162:1264, 1990
- Post menopausal bleeding
  - PPV 78%
  - Negative predictive value 99.4% (Clark T et al. JAMA. 288:1610, Oct 2002

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Office Based Detection of Endometrial CA

Vaginal probe ultrasound + office hysteroscopy + Pipelle endometrial biopsy = Hysteroscopy and D&C for the detection of endometrial cancer.

Tahir M et al. BJOG 107:1058 Aug 2000

Does hysteroscopy influence the prognosis of early stage Endometrial Cancer?

- Means of diagnosis compared
  - Endometrial biopsy
  - Hysteroscopy
- Results
  - Higher recurrence with endometrial biopsy
  - No difference in peritoneal cytology or 5 yr. survival rates.

Ben-Arie et al. Int J Gynecol CA July 2008

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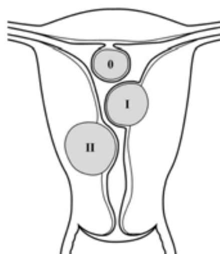
Information Changes Management

- **Submucous myomata**
  - **Type 0 - 100% w/in cavity**
  - **Type I - > 50% w/in cavity**
  - **Type II - < 50% w/in cavity**



deBlok S, et al: Gynaecol Enosc 4:243-246, 1995

Office hysteroscopy non-disposable equipment

- Hysteroscope
  - Flexible
  - Rigid
    - 12, 25, 30 degree angled lenses
    - Operative instruments
- Cart
  - Light source, light cable, monitor, camera (on cart or built into scope, image capture)

OfficePACK Hysteroscopy kit

- Custom mayo drape with built in instrument pockets and trash container
- Disposable mayo tray (will fit any office mayo stand)
- OfficeSPEC disposable side-opening speculum with light
- 1.2mm Endoscopic leak free seal
- Inflow and outflow tubing with luer-lock adaptors
- Under buttocks drape with graded drain bag
- Drawstring tie for easy post procedure disposal
- ALL ITEMS ARE STERILE & LATEX-FREE

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OfficeSPEC Disposable Side-Opening Speculum

- Built-in battery operated disposable light source for improved visibility
- Smoke channel for use with suction during electrosurgical procedures
- Click-Free ergonomic design for improved patient comfort
- Side opening for improved instrument access and removal

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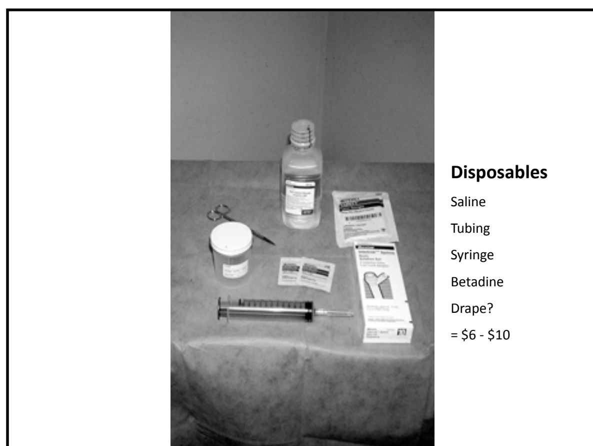

Timing of Office Hysteroscopy

- Early follicular phase
- After GnRHa suppression for 4-6 weeks

Uterine Distention

- Isotonic solution
  - Normal saline
  - D5LR
  - Inject via a 60 cc syringe connected to IV tubing
- Sorbitol - Hypotonic
- Glycine - Hypotonic
- CO_2

CO_2 vs. Saline - Pain

- 184 randomized - primary infertility
  - 3 mm rigid vs 5 mm rigid - vaginoscopic
  - Experienced vs novice hysteroscopist (<100)
  - CO_2 vs Saline
- Less pain with novice and saline
  - No difference with experience and saline

Pluchino N et al. JMIG vol 17, May/June 2010 p344

Operative Office Hysteroscopy

- Standard Approach
  - Speculum – preferable side opening
  - Tenaculum
- Vaginoscopic approach
  - No speculum or tenaculum
  - Bettocchi S, Selvaggi L. A vaginoscopic approach to reduce the pain of office hysteroscopy. J Am Assoc Gynecol Laparosc 1997;4:255-8.
  - Cicinelli E, Parisi C, Galantino P, Pinto V, Barba B, Schonauer S. Reliability, feasibility, and safety of minihysteroscopy with a vaginoscopic approach: experience with 6,000 cases. Fertil Steril 2003;80:199-202

Office Hysteroscopic procedures

- Diagnostic Hysteroscopy
- Visually directed endometrial biopsy
- Polypectomy
- Myomectomy
- Adhesiolysis
- Metroplasty
- Proximal tubal recanalization

Costs and Reimbursements

- Diagnostic Hysteroscopy
  - CPT - 58555
  - RVU - 5.63
  - Medicare - $241,
  - Managed care - $233
  - R&C $723

Costs and Reimbursements

- Hysteroscopy with biopsy
  - CPT - 58558
  - RVU - 7.18
  - Medicare - $317
  - Managed Care - $312
  - R&C - $822

Costs and Reimbursements

- Capital equipment - $12,000-$15,000
  - Flexible scope
  - Monitor
  - Light source
  - Camera
  - Cart