



## INTRODUCTION:

In premenopausal women, polyps or submucosal myomas are the most common anatomic abnormalities encountered, reported to be present in up to 40% or more of patients under evaluation.<sup>1</sup> Although the incidence of endometrial carcinoma is only 6.96 per 1000 women, it is important to exclude in cases of postmenopausal bleeding.<sup>2</sup>

The recommended investigation of abnormal uterine bleeding from the Royal College of Obstetri-

cians and Gynecologists is that women, over the age of 45, should be investigated with hysteroscopy and endometrial biopsy.<sup>3</sup>

Outpatient endometrial sampling devices, unlike directed biopsy, the sample is obtained blind. As little as 4% of the cavity may be sampled and polypoid lesions are unlikely to be removed.<sup>4</sup> However, the reported sensitivity for detecting endometrial abnormality is approximately 85%.<sup>5</sup>

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: Bold, Complex Script Font: Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Top: 5.88", Right

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Line spacing: single

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Indent: First line: 0", Line spacing: single

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Line spacing: single

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Line spacing: single

### Formatted Table

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Space After: 0 pt, Line spacing: single, Position: Horizontal: 6.88", Relative to: Page, Vertical: 0.03", Relative to: Paragraph

**Formatted**

**Formatted**

**Formatted:** Space After: 0 pt, Line spacing: single

**Formatted**

**Formatted:** Centered, Space After: 0 pt, Line spacing: single

**Formatted**

The first line diagnostic tool for uterine abnormalities is trans-vaginal sonography (TVS). It is an easy, fast and cheap technique that has become widely used. TVS has already proved to be a method with high reliability in diagnosing this pathology.<sup>6</sup>

TVS has been widely used during the last 10 years as an alternative method for identifying women at risk of endometrial disease. It is well accepted by most patients within the office setting. Brief trans-vaginal sonography can be used for visualization of the endometrium, uterus and adnexa, giving a global picture of the pelvis that hysteroscopy cannot.<sup>7</sup>

Hysteroscopy is the second step, which serves after an ultrasound examination as a form of screening.<sup>6</sup> Since then, several large series have demonstrated that it is an acceptable and reliable alternative to examination under anaesthesia.<sup>8</sup> The advantage of hysteroscopy is that we diagnose and treat the changes we notice at the same time. The standard advantages of hysteroscopy provide greater comfort for the patients, since it excludes the need to stay in hospital and decreases the time of treatment, but also the time needed to prepare the patient for further procedures, e.g. medically assisted conception.<sup>6</sup>

Although median pain scores are significantly higher than those reported for inpatient hysteroscopy, anxiety levels are lower and there is no significant difference in overall patient acceptability between the two procedures.<sup>8</sup> Because the hysteroscopy is introduced under direct vision, major complications are extremely rare and minor complications occur in less than 2% of patients.<sup>9</sup>

Hysteroscopy has become the gold standard for the evaluation of patients with abnormal uterine bleeding but it is an invasive procedure and may need admission in some cases. Even in the United States, only 20% of gynecologists are doing office hysteroscopy.<sup>10</sup> Direct visualization of uterine cavity is possible by using hysteroscopy but it does not give any information regarding myometrium and adnexa.<sup>10</sup>

This study was designed to develop a normogram using trans-vaginal ultrasound results to select those women who do not need further evaluation with office hysteroscopy and patients with organic pathology and will be directed either to operative hysteroscopy, endoscopy or laparotomy. The study was also concerned with the time required to complete each investigation and also minor adverse effects of each investigation were reported.

#### PATIENTS AND METHODS:

This study was carried out in the Endoscopy Unit of Minia Maternity University Hospital, El-Minia University, between December 2007 and March 2011. Scientific ethical committee of the department of Obstetrics and Gynecology, on October 2007, and the Institutional Review Board of the University Hospital-Quality control unit of the Faculty of Medicine, Minia University on December 2007, approved the study. A total of 120 patients were referred to this Unit due to abnormal uterine bleeding in the childbearing period regardless their age during this period.

Routine evaluation tests were done with a complete blood count, TSH, and coagulation studies,

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Top: 5.88", Right

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Line spacing: single

**Formatted:** After: -0.11", Space After: 0 pt, Line spacing: single

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Justify Low, Space After: 0 pt, Line spacing: single

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted**

**Formatted:** Centered, Space After: 0 pt, Line spacing: single

**Formatted**

including pregnancy testing for all women, written consent and approval to participate in this study were taken before starting.

The patient was placed in the lithotomy position with her ankles supported by stirrups. A bimanual vaginal examination was performed to note the size, position and shape of the uterus and the presence or absence of adnexal pathology.

Trans-vaginal sonography (Toshiba SSA-340, Japan) was performed using a 7.5 MHz trans-vaginal transducer. Application of trans-vaginal sonography was methodical for diagnostic accuracy. An organ-oriented approach was done for systematic pelvic assessment. The uterus was used for organ orientation. The endometrium measured from myometrial interface to myometrial interface (double thickness) should appear homogenous

The midline echo was considered to be normal when a straight endometrial lining with well defined margins and without echo dense foci was found. Heterogeneous variations within the echogenicity of the endometrium are highly significant. Polyps may appear hyperechoic or hypoechoic with regard to the surrounding endometrium. The polyp itself may appear homogeneous or heterogeneous, especially when cystic components are present. Myomas, regardless of their location, had a specific sonographic appearance. They are usually hyperechoic (brighter) with regard to the remainder of the myometrium, generally homogenous, and cause a distal shadowing of the image because sound is unable to pass easily through the muscle whorls that form the myomas. The location of myomas

could be distinctly discerned by sonography. Differences between mostly submucosal, intramural or subserosal myomas was done correctly.

Through vaginoscopic approach and without dilation of cervical os office hysteroscopy (versapoint, Gynecare, USA angle of vision 0 and diameter 2.7) the telescope is advanced through the cervical canal under vision with the application of the camera before the introduction. The telescope was attached to the light source (Karl Storz) by a fiberoptic light cable and the images displayed on a Sony Trinitron monitor using a Telecam Pal three chip camera system (Karl Storz). The outer sheath is connected to the manual infusion pump that allowed distension of the uterus with fluid medium.

The endometrium was serially inspected for pathology. When the inspection of the cavity was complete the fluid and scope were removed from the uterus.

Hysteroscopic endometrial samples were obtained. The specimen was placed in formalin and sent for histopathological analysis. Neither analgesia nor anesthesia was routinely used and was not required by any patient in this series.

**RESULTS:**

The average age of the patients referred was 40.5 years (29-51). Nine subjects were nulliparas, twelve were grand multiparas and the remainder had had between one and five vaginal deliveries. Of the 120 patients, it was not possible to perform outpatient hysteroscopy in four cases due to cervical stenosis. Presenting complaints of participating women were as

Formatted: Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

Formatted: Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

Formatted: Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

Formatted: Font: Bold, Complex Script Font: Bold

Formatted: Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Top: 5.88", Right

Formatted: Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

Formatted: Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

Formatted: Indent: First line: 0.5", Line spacing: single

Formatted: Space After: 0 pt, Line spacing: single

Formatted

Formatted

Formatted: Line spacing: single

Formatted

Formatted: Line spacing: single

Formatted

Formatted

Formatted

Formatted

Formatted: Line spacing: single

Formatted

Formatted

Formatted

Formatted

Formatted Table

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted





**Fig (1): Normal cavity during office hysteroscopy**



**Fig (2): Polyp seen by office hysteroscopy**

**Fig (2): Polyp seen by office hysteroscopy**

**DISCUSSION:**

This study undertook an actual evaluation of three outpatient methods for diagnostic evaluation of AUB, in terms of ability of the technique itself to solve the problem and minor adverse effects. This study aimed to establish what investigation is most acceptable and most efficient in achieving diagnosis in the majority of referrals with an AUB complaint. Furthermore, it aimed to determine in premenopausal women which investigation strategy allows best management of their menstrual bleeding problem.

For benign but clinically relevant uterine disease, the estimation of the sensitivity and specificity of a diagnostic method is difficult because there is no gold-standard diagnosis that could be used for research. It is well known that not all fibroids cause heavy bleeding, and the clinical significances of polyps are not yet clear. In both conditions some occurrences may be associated with symptoms, but not necessarily all. Therefore, an investigation method that detected (and led to treatment of) structural variants of the uterus that were not of clinical relevance would waste resources, and

- Formatted: Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold
- Formatted: Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Top: 5.88", Right
- Formatted: Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold
- Formatted: Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold
- Formatted: Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted: Font: Bold, Complex Script Font: Bold
- Formatted: Centered
- Formatted: Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted: Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted: Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted: Line spacing: single

- Formatted: Font: Bold, Complex Script Font: Bold
- Formatted: Centered
- Formatted: Line spacing: single
- Formatted: Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted: Line spacing: single
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted
- Formatted





sensitivity and specificity of procedure as 84% and 88%, respectively.<sup>14</sup> Bonnamy et al (2002) reported sensitivity and specificity of hysteroscopy as 78% and 97% in patients with AUB.<sup>15</sup> Kelekci et al (2005) found sensitivity of 87.5% and specificity of 100% for hysteroscopy in detecting intra-cavitary abnormalities.<sup>16</sup> In Allameh and Mohammadzadeh (2007) study, sensitivity, specificity, PPV and NPV of hysteroscopy in patients with AUB were 100%, 80.5%, 88.9% and 100%, respectively.<sup>17</sup>

The sensitivity and specificity of office hysteroscopy examination have been reported to be as high as 85-91% and 83-100%, respectively.<sup>18</sup> In a more recent study, 14% of 114 patients showing normal TVS findings revealed abnormalities upon hysterosonography examination.<sup>19</sup> However, the study was limited to those patients' with normal TVS findings and there has not been any extensive study for actually evaluating the role of hysterosonography as a screening method for patients with abnormal uterine bleeding.

Hysteroscopy is believed to be the "gold standard" for diagnosis of abnormal uterine bleeding<sup>20</sup> and misses less than 0.5% of serious disease such as endometrial cancer.<sup>20</sup> Regarding ultrasound scanning for the evaluation of abnormal uterine bleeding, two important studies compared the diagnostic accuracy of vaginal-probe ultrasonography against office hysteroscopy<sup>20</sup> and saline solution-infusion-sonography (SIS) against office hysteroscopy.<sup>20</sup> Both studies found that ultrasonography and hysteroscopy were effective for detecting intrauterine disease such as polyps, submucous myomata, and endometrial hyperplasia, but there were fewer false-positive and false-

negative results with hysteroscopy. The Widrich et al. study<sup>21</sup> did show that patients had more discomfort with office hysteroscopy than with SIS, but they did not use any local anesthetic with either procedure.

The rate of abnormalities found in patients with abnormal uterine bleeding ranges from 40% to 85%, but precise diagnosis of suspicious tissue must always be done with histological examination of the tissue.<sup>22</sup> With such a high rate of positive findings, it is apparent that office hysteroscopy should be used for primary screening in evaluating the patient with abnormal uterine bleeding, because, in most situations, both the screening and the management can be affected in a single sitting.

In 46 women with histological examination, Balic and Balic 2011 reported that the sensitivity of TVS and hysteroscopy in the diagnosis of endometrial polyps were identical - 100%, while the specificity was higher in hysteroscopy than in TVS (92.3% versus 56.4%,  $p < 0.001$ ). The sensitivity of TVS in the diagnosis of endometrial hyperplasia was higher than that of hysteroscopy (86.4% versus 22.7%,  $p < 0.001$ ), while specificity was identical, of 100%. Accordance between hysteroscopy and histology was good ( $k=0.79$ ), between ultrasound and histology was moderate ( $k=0.59$ ). They concluded that hysteroscopy appeared to be more reliable in diagnosis than TVS. The use of a high frequency ultrasound probe leads us to a lack of diagnostic clarity between endometrial polyps and hyperplasia.<sup>23</sup>

Office hysteroscopy is a safe, comfortable, enormously convenient, and precise method of evaluating and managing at the same time most cases

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Top: 5.88", Right

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: 10 pt, Complex Script Font: 10 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: 10 pt, Complex Script Font: 10 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** After: -0.11", Space After: 0 pt, Line spacing: single

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Justify Low, Space After: 0 pt, Line spacing: single

**Formatted**

**Formatted**

**Formatted:** Centered, Space After: 0 pt, Line spacing: single

**Formatted**

of abnormal uterine bleeding. As a screening tool, hysteroscopy may be costly and inappropriately time-consuming when one considers the patients for whom there is no anatomic defect inside the uterine cavity.<sup>24</sup>

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Top: 5.88", Right

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: Bold, Complex Script Font: Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted Table**

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Space After: 0 pt, Line spacing: single, Position: Horizontal: 6.88", Relative to: Page, Vertical: 0.03", Relative to: Paragraph

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Space After: 0 pt, Line spacing: single

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Centered, Space After: 0 pt, Line spacing: single

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Conclusion**

Due to its low sensitivity office hysteroscopy is not an ideal test for screening of abnormal uterine bleeding. Trans-vaginal ultrasound can direct the patients with organic pathology either to do operative hysteroscopy, endoscopy or laparotomy. Patients with normal endometrial thickness and morphology in vaginal scanning will not need further evaluation and may benefit from medical treatment

**REFERENCES:**

1. Dueholm M, Lundord E, Olesen F. Imaging techniques for evaluation of the uterine cavity and endometrium in premenopausal patients before minimally invasive surgery. *Obstet Gynecol Survey*. 2002; 57: 388–403.

2. Koss L G. Detection of occult endometrial carcinoma. *J Cell Biochem* 1995; Suppl, 23: 165-73.

3. Royal College of Obstetricians and Gynaecologists. Guidelines No. 3, April 1994.

4. Rodriguez G C, Yaqub N, King M E. A comparison of the Pipelle device and the Vabra aspirator as measured by endometrial denudation in hysterectomy specimens: the Pipelle device samples significantly less of the endometrial surface than the Vabra aspirator. *Am J Obstet Gynecol* 1993; 168: 55-9.

5. Guido R S, Kanbour-Shakir A, Rulin M C, Christopherson W A. Pipelle endometrial sampling. Sensitivity in the detection of endometrial cancer. *J Reprod Med* 1995; 40: 553-5.

6. Ait Benkaddour Y, Gervaise A, Fernandez H. Which is the method of choice for evaluating uterine cavity in

infertility workup? *Gynecol Obstet Biol Reprod*. 2010; 39(8): 606-13.

7. Fleischer AC, Entman SS. Sonographic evaluation of pelvic masses with transabdominal and transvaginal scanning. In: Fleischer AC, Romero R, Manning FA, Jeanty P, James AE Jr, eds. *The Principles and Practice of Ultrasonography in Obstetrics and Gynecology*. 4th ed. Norwalk, Conn: Appleton & Lange. 1991; 25:537–556.

8. Tahir MM, Bigrigg MA, Browning JJ et al. A randomized controlled trial comparing transvaginal ultrasound, outpatient hysteroscopy and endometrial biopsy with inpatient hysteroscopy and curettage. *British Journal of Obstetrics and Gynaecology* 1999; 106: 1259±1264.

9. Hildebaugh D. A comparison of clinical outcomes and cost of office versus hospital hysteroscopy. *Journal of the American Association of Gynecologic Laparoscopists* 1996; 4: 39±45.

10. Pasrija S, Trivedi SS, Norula MK. Prospective study of saline infusion sonohysterography in evaluation of perimenopausal and postmenopausal women with abnormal uterine bleeding. *J Obstet Gynecol Res* 2004; 30:27–33.

11. Clark TJ, Mann CH, Shah N, Song F, Khan KS, Gupta JK. Accuracy of outpatient endometrial biopsy in the diagnosis of endometrial cancer: A systematic qualitative review. *Br J Obstet Gynaecol* 2002; 109:313–21.

12. Jakab AJ, Ovari L, Juhasz B, Birinyi L, Bacsko G, Toth Z. Ultrasound diagnosis of focal intrauterine lesions. *Orv Hetil* 2002; 143:1739 – 1743.

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Tab stops: 5.88", Right

**Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Indent: Before: 0", First line: 0.25", Line spacing: single, Numbered + Level 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 Alignment: Left + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5", Tab stops: None at 0.5"

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

**Formatted:** After: -0.11", Space After: 0 pt Line spacing: single

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Justify Low, Space After: 0 pt, Line spacing: single

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman

**Formatted:** Centered, Space After: 0 pt, Line spacing: single

**Formatted:** Font: (Default) Times New Roman, 10 pt, Complex Script Font: Times New Roman, 10 pt



23.

23-24. —Brooks PG. In the management of abnormal uterine bleeding, is office hysteroscopy preferable to sonography? The case for hysteroscopy. Journal of Minimally Invasive Gynecology 2007; 14, 12-14.

- Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold
- Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold
- Formatted:** Normal, After: 0.02", Border: Bottom: (Single solid line, Auto, 1.5 pt Line width, From text: 11 pt Border spacing: ), Tab stops: 5.88", Right
- Formatted:** Font: (Default) Times New Roman, 10 pt, Bold, Complex Script Font: Times New Roman, 10 pt, Bold
- Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted:** Indent: Before: 0", Space After: 0 pt, Line spacing: single
- Formatted:** Indent: Before: 0", First line: 0.25", Line spacing: single, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5", Tab stops: None at 0.5"
- Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt
- Formatted:** Font: (Default) Times New Roman, 12 pt, Complex Script Font: Times New Roman, 12 pt

- Formatted:** After: -0.11", Space After: 0 pt, Line spacing: single
- Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman
- Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman
- Formatted:** Justify Low, Space After: 0 pt, Line spacing: single
- Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman
- Formatted:** Font: (Default) Times New Roman, Complex Script Font: Times New Roman
- Formatted:** Centered, Space After: 0 pt, Line spacing: single
- Formatted:** Font: (Default) Times New Roman, 10 pt, Complex Script Font: Times New Roman, 10 pt