

## Importance of Office Hysteroscopy

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**Received:** August 14, 2017; **Accepted:** August 16, 2017; **Published:** August 18, 2017

For sixty years, hysteroscopy can be considered a really revolution in modern gynaecology [1]. In the early 1980s, advances in techniques and instruments [2] made hysteroscopy even less invasive [3,4] and less painful [5] and took it out of the operating theatre, increasing the number of procedures carried out in a doctor's office (office hysteroscopy) [6]. In the mid-1980s, surgical hysteroscopy using a resectoscope and electrosurgical systems grew rapidly. This allowed the treatment of women suffering from a wide range of intrauterine pathologies, including abnormal uterine bleeding, infertility and recurrent spontaneous abortions, etc. [7,8]. Towards the end of the 1990s, the development of small-diameter hysteroscopes with a continuous flow operating sheath allowed the operator to examine the cavity, perform a biopsy and treat certain benign intrauterine pathologies using miniaturized instruments, all within a relatively short space of time. The entire procedure could be performed without the need for general anaesthetic or an operating theatre (office operative hysteroscopy) [9].

Improvements in instrumentation and the spread of new and ever less invasive techniques have opened up new horizons in surgery [10]. More than any other, this procedure is now able to resolve problems non-invasively outside the hospital, problems which up until a few years ago required hospital admission, general anaesthetic and even laparotomy. This new approach has evolved due to technological advances in instrumentation, one that combines diagnosis and surgery into a single clinical procedure, i.e., "See and Treat" [11]. It allows diseases affecting the uterine cavity to be diagnosed in the office and to proceed immediately with treatment to resolve them, thus avoiding the patient having to undergo a subsequent procedure [12].

Uterine anomalies of the myometrium and endometrium represent only 2-3% of the reasons for infertility. However, these are much more common in infertile woman [40-50%] and may be the cause of sterility and/or pregnancy loss. Up until recently, hysterosalpingography (HSG), transvaginal ultrasound (TV) and hysterosonography were the most commonly used screening methods to detect abnormalities of the uterine cavity [13,14] while hysteroscopy was used as a second-line investigative tool [15,16]. Nowadays, the diagnosis and treatment of this problem has since been revolutionized by hysteroscopy [17]. Indeed, the study of the uterine cavity is now the first line of investigation in the protocol for treating sterility [18]. Hysteroscopy is also the first line of investigation in medically assisted procreation programmes [19]. Since office hysteroscopic diagnosis and surgery can now be combined into a single procedure [20],

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**Citation:** Palmara VI (2017) Importance of Office Hysteroscopy. J Biomed Sci Appl Vol. 1 No. 1: 1.

thereby speeding up treatment for intrauterine pathologies and ensuring more effective sterility treatment, means that Office Hysteroscopy represents the "gold standard" [9-10] for treatment of intrauterine and/or cervical diseases. A few minutes of minimal discomfort [5], tolerated by almost all women undergoing this procedure, resolves problems that often underlie reproductive incapacity [21-23].

In fact, through this new procedure today we can diagnose in few minutes uterine pathologies and treat them during an outpatient visit, avoiding general anesthesia, avoiding other discomfort and especially without hospitalization.

The pathologies we can deal with using office hysteroscopy are uterine polyps, smaller than 3 cm in diameter, myomas of less than 1.5 cm in diameter, synechiae, endometrial hyperplasia with bioptic removal of endometrial for histological examination.

It can detect numerous uterine disorders that may lead to infertility or sterility, including cervical stenosis, intrauterine adhesions and small benign submucosal polyps or myomas [24-28].

These are all visceral abnormalities affecting the uterus neck or body that may cause primary or secondary sterility [21-23]. It was found that these can be resolved by office hysteroscopy, thereby averting the need for any form of anaesthesia which is a prerequisite for resectoscopic surgery. More importantly, the procedure incurs minimal discomfort for the patient [3,4].

For all these features, we can affirm that Office hysteroscopy is the most innovative procedure as it does not require any anaesthetic, is almost painless and atraumatic and can be done in a doctor's office.

## References

- Gribb JJ (1960) Hysteroscopy an aid in gynecologic diagnosis. *Obstet Gynecol* 15: 593-601.
- Valle RF, Sciarra JJ (1979) Current status of hysteroscopy in gynecologic practice. *Fertil Steril* 32: 619-632.
- Cicinelli E, Parisi C, Galantino P, Pinto V, Barba B, et al. (2003) Reliability, feasibility, and safety of minihysteroscopy with a vaginoscopic approach experience with 6,000 cases. *Fertility and sterility* 80: 199-202.
- Cicinelli E (2005) Diagnostic minihysteroscopy with vaginoscopic approach rationale and advantages. *J Minim Invasive Gynecol* 12: 396-400.
- Bettocchi S, Selvaggi L (1997) A vaginoscopic approach to reduce the pain of office hysteroscopy. *J Am Assoc Gynecol Laparosc* 4: 255-258.
- Angelis CD, Santoro G, Re ME, Nofroni I (2003) Office hysteroscopy and compliance: mini-hysteroscopy versus traditional hysteroscopy in a randomized trial. *Human Reproduction* 18: 2441-2445.
- Loffer FD (1990) Removal of large symptomatic intrauterine growths by the hysteroscopic resectoscope. *Obstet Gynecol* 76: 836-840.
- Hamou J (1993) Electroresection of fibroids. In: Sutton C, Diamond MP (eds.), *Endoscopic Surgery for Gynecologists*. WB Saunders, University of California Libraries, London, United Kingdom, pp: 327-330.
- Bettocchi S (1996) New era of office hysteroscopy. *J Am Assoc Gynecol Laparosc* 3: 4.
- Campo R, Van Belle Y, Rombauts L, Brosens I, Gordts S, et al. (1999) Office mini-hysteroscopy. *Hum Reprod Update* 5: 73-81.
- Bettocchi S, Ceci O, Nappi L, Di Venere R, Masciopinto V, et al. (2004) Operative office hysteroscopy without anesthesia: analysis of 4863 cases performed with mechanical instruments. *J Am Assoc Gynecol Laparosc* 11: 59-61.
- Bettocchi S, Ceci O, Di Venere R, Pansini MV, Pellegrino A, et al. (2002) Advanced operative office hysteroscopy without anaesthesia: analysis of 501 cases treated with a 5 Fr. bipolar electrode. *Human Reproduction* 17: 2435-2438.
- Brown SE, Coddington CC, Schnorr J, Toner JP, Gibbons W, et al. (2000) Evaluation of outpatient hysteroscopy, saline infusion hysterosonography, and hysterosalpingography in infertile women: a prospective, randomized study. *Fertility and Sterility* 74: 1029-1034.
- Wang CW, Lee CL, Lai YM, Tsai CC, Chang MY, et al. (1996) Soong YK. Comparison of hysterosalpingography and hysteroscopy in female infertility. *J Am Assoc Gynecol Laparosc* 3: 581-584.
- Fayez JA, Mutie G, Schneider PJ (1987) The diagnostic value of hysterosalpingography and hysteroscopy in infertility investigation. *Am J Obstet Gynecol* 156: 558-560.
- Soares SR, Barbosa dos Reis MM, Camargos AF (2000) Diagnostic accuracy of sonohysterography, transvaginal sonography, and hysterosalpingography in patients with uterine cavity diseases. *Fertil Steril* 73: 406-411.
- Tulandi T, Marzal A (2012) Redefining reproductive surgery. *Minim Invasive Gynecol* 19: 296-306.
- Trninić-Pjević A, Kopitović V, Pop-Trajković S, Bjelica A, Bujas I (2011) Effect of hysteroscopic examination on the outcome of in vitro fertilization. *Vojnosanit Pregl* 68: 476-480.
- Bettocchi S, Achilarré MT, Ceci O, Luigi S (2011) Fertility-enhancing hysteroscopic surgery. *Semin Reprod Med* 29: 75-82.
- Karayalcin R, Ozyer S, Ozcan S, Uzunlar O, Gurlek B, et al. (2012) Office hysteroscopy improves pregnancy rates following IVF. *Reprod Biomed Online* 25: 261-266.
- Homer HA, Li TC, Cooke ID (2000) The septate uterus: a review of management and reproductive outcome. *Fertil Steril* 73: 1-14.
- Shokeir TA, Shalan HM, El-Shafei MM (2004) Significance of endometrial polyps detected hysteroscopically in eumenorrhic infertile women. *J Obstet Gynaecol Res* 30: 84-89.
- Somigliana E, Vercellini P, Daguati R, Pasin R, De Giorgi O (2007) Fibroids and female reproduction: a critical analysis of the evidence. *Hum Reprod Update* 13: 465-476.
- Donnez J, Jadoul P (2002) What are the implications of fibroids on fertility? A need for a debate?. *Hum Reprod* 17: 1424-1430.
- Asherman JG (1957) Traumatic intrauterine adhesions and their effects on fertility. *Int J Fertil* 2: 49-54.
- Ludwin A, Ludwin I, Kudla M, Pitynski K, Banas T, et al. (2014) Diagnostic accuracy of three-dimensional sonohysterography compared with office hysteroscopy and its interrater/intrarater agreement in uterine cavity assessment after hysteroscopic metroplasty. *Fertil Steril* 101: 1392-1399.
- Bosteels J, Kasius J, Weyers S, Broekmans FJ, Mol BW, et al. (2013) Hysteroscopy for treating subfertility associated with suspected major uterine cavity abnormalities. *Cochrane Database Syst* 1: CD009461.
- Karayalcin R, Ozyer S, Ozcan S, Uzunlar O, Gurlek B, et al. (2012) Moraloglu O, Batioglu S Office hysteroscopy improves pregnancy rates following IVF. *Reprod Biomed Online* 25: 261-266.