

Hysteroscopy - 3 Years Experience at a Teaching Hospital

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Objective: To evaluate the indications, effectiveness and safety of hysteroscopy in Gynaecological surgery. **Design, Duration and Place of study:** A retrospective observational study from January 2003 to December 2005 at Fatima Memorial Hospital, Lahore. **Patients and Methods:** 76 patients who presented in the outpatient department of Gynae and Obstetrics at Fatima Memorial Hospital, Lahore with the following complaints including abnormal uterine bleeding, infertility, recurrent abortions and secondary amenorrhea were included in the study. They were pre-operatively investigated and admitted a day prior to the surgery and discharged usually within 24 hours postoperatively. The subsequent follow-up was done in outpatient department. All the data was recorded and then subsequently analyzed. **Results:** 76 patients were induced in the study. Out of these 36 (47%) had infertility 20 (26.3%) had abnormal uterine bleeding, 8 patients (10.5%) had recurrent abortions, 8 (10.5%) presented with secondary amenorrhea, 3 patients (3.9%) presented with lost IUCD and one patient (1.3%) had follow-up hysteroscopy after resection of intra-uterine septum. Hysteroscopic findings revealed intra-uterine adhesions in 8 (10.5%), submucous fibroids in 15 (19.7%), endometrial polyp in 10 (13.1%) uterine septa in 8 (10.5%), atrophic endometrium in 9 (11.8%) while there was no abnormal finding in 26 (34.2%) patients. Two patients (0.6%) sustained uterine perforations, which were diagnosed and managed during operation but no other complication occurred. **Conclusion:** Hysteroscopy is an excellent tool to perform intra-uterine adhesiolysis, polypectomy, submucous myomectomy and endometrial ablation. In addition to being a quicker, less invasive and low risk procedure, it has got the advantage of being cheap with a shorter hospital stay and diminished recovery time. Hysteroscopy, both diagnostic and operative should be an integral part of gynaecological surgery in the teaching units.

Keywords: Hysteroscopy, Endometrium, Endometrial hyperplasia, Hysterectomy

Surgical approach to intra-uterine lesions have always been a major concern particularly when reproductive potential is to be conserved. Conventional procedures are laparotomy and hysterotomy which are associated with extensive dissection, morbidity, prolonged hospitalization and increased cost to the patient. Management of intra-uterine lesions is made simple through hysteroscopy. Hysteroscopy permits direct visualization and assessment of the endocervical and uterine cavities.

Hysteroscopic surgery is a type of minimally invasive surgery through which intra uterine pathologies can be diagnosed and corrected surgically¹. This technique of dealing with intra-uterine pathologies which does not involve an abdominal incision, uterine scar or any risk of post operative adhesions is especially attractive for young women where future fertility is an important consideration. The indications for hysteroscopy are post-menopausal bleeding², abnormal uterine bleeding, recurrent abortions, primary or secondary infertility. It is also valuable in the diagnosis of congenital abnormalities of uterus, endometrial polyps or submucous fibroids³, endometrial carcinoma, uterine synechiae and postmenopausal endometritis, which can only be made by direct examination of uterus⁴.

Material and methods

Seventy-six patients from 2003-2005 who presented in the outpatient department of Fatima Memorial Hospital, Lahore with the presenting complaints of, abnormal uterine bleeding, infertility, recurrent abortions and secondary amenorrhea were included in the study. Information regarding patient's data, indication and per-operative finding were entered on predesigned forms. Results were compared with those in the literature. Hysteroscopy planned in the proliferative phase of the

menstrual cycle, patients were admitted on the day of operation and all procedures done under general anaesthesia. The distension medium used was 5% dextrose water.

In case of intra uterine adhesions, lysis was done by using electrocautery, microscissors or resectoscope. After surgery a Foley catheter having balloon filled with 30ml of distilled water was left in the uterine cavity for 10 days with broad spectrum antibiotic coverage.

Resection of submucous fibroids and metroplasties were done with the help of resectoscope and microscissors. The endometrial polyps were removed simply with help of a small hysteroscopic snare or by cauterizing the base. For endometrial resection, electrocoagulation was done. Whenever there was uterine perforation, the surgeon was called.

Results

A total of 76 hysteroscopies were performed in the study period for Infertility 36(47%) followed by abnormal uterine bleeding 20(26%), recurrent abortion 8(10.5%), secondary amenorrhoea 8(10.5%) and lost IUCD 3(3.9%). The indications are listed in Table 1.

Table 1: Indication of hysteroscopy

Indications	=n	%age
Primary infertility	20	26.3
Abnormal uterine bleeding	20	26.3
Secondary infertility	16	21
Recurrent abortions	08	10.5
Secondary amenorrhea	08	10.5
Lost IUCD	03	3.9
Follow-up hysteroscopy after resection of uterine septum	01	1.3

60(78%) patients were in the age group of 30-40 yrs and 36(47%) were nullipara. Summary of hysteroscopic

findings is given in Table II. Two (2.6%) of our patients did sustain uterine perforations which were diagnosed and managed during the surgery.

Table II: Hysteroscopy findings

Findings	=n	%age
Normal	26	34.2
Endometrial polyp	10	13.1
Intrauterine adhesions	08	10.5
Submucous fibroids	15	19.7
Uterine septum	08	10.5
Atrophic endometrium	09	11.8

Discussion

Hysteroscopy is a form of minimally invasive surgery which offers a reliable method of assessing intrauterine pathology². It thus facilitates an accurate diagnosis with appropriate biopsy and therapeutic intervention as well. Thus the hysteroscope has become an important diagnostic as well as therapeutic tool in the assessment of uterine function and fertility.

The major indications for which hysteroscopy was performed in our unit were abnormal uterine bleeding, infertility and recurrent abortions. During last 20 years, there has been a steady increase in menstrual disorders. It is the commonest cause of gynaecological referrals⁷. Patients suffering from this symptom are traditionally assessed by dilatation and curettage (D&C) under general anaesthesia. However in most centers the operation is still delegated to junior doctor and complications of the procedure, especially fundal perforation with a sound or dilator are frequent. Tissue samples for histological diagnosis are available but it is rare for histology to help in diagnosing functional disorders. Moreover D&C has little therapeutic effect in irregular uterine bleeding and it is also poor in diagnosing focal endometrial lesions such as polyps or submucous fibroids. Dilatation and curettage increases the risk of uterine adhesions, tubal damage and infertility⁸. Hysteroscopy is shown to be much superior to curettage in making accurate diagnosis of pathologic conditions of the uterine cavity⁹. In our unit 20(26%) patients who presented with abnormal uterine bleeding were assessed by hysteroscopy and in 6(30%) patients submucous fibroids were present.

The management of abnormal uterine bleeding is often fraught with frustration and failure. In too many instances the last resort is hysterectomy⁶. Hysterectomy however is a major surgical procedure with significant physical and emotional complications. It also involves a significant stay in hospital (5-10 days) and a convalescent period of between three and six weeks. The social and economic costs of this are considerable.

Different trials have shown that hysteroscopic surgery compares favorably with hysterectomy in terms of hospital stay (One day & in cases where there was uterine perforation 2-3 days), cost effectiveness¹¹ and patient satisfaction. Preoperative treatment with gonadotrophin

releasing hormone analogues before endometrial resection reduced the amount of distension fluid absorbed, slightly shortened operating time and facilitated intrauterine surgical conditions¹².

In our study, endometrial resection was done in 20 (26.3%) cases and the patient's satisfaction and immediate short-term follow-up was available. However, in our setup, we did not have the data to see the failure rate of endometrial resection in terms of need for hysterectomy.

Conclusion

Our study indicates that hysteroscopy provides a very good diagnostic and therapeutic yield in most gynaecological problems. Hysteroscopically performed operative procedures carry a low rate of morbidity with satisfactory efficacy and rapid post operative recovery. Therefore, it is recommended that hysteroscopy both diagnostic and operative should be taught in at least all major health units. Along with this, a long-term follow-up data is also required to look for any remote complications. However the limitations of the technique regarding the acquisition of certain degree of competence and skill, so as to avoid complications, should be kept in mind.

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