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## Editorial

### HYSTEROSCOPY

by

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Hysteroscopy is the oldest gynaecological endoscopic procedure. The very first hysteroscopy was performed in 1869 by Panteleoni. He found polyps in his 60 year old patient with intractable postmenopausal bleeding and treated them with silver nitrate. Since then the hysteroscopic equipment has passed through many stages of development and growth. During the last 15 years the instruments have been perfected and the procedure made practical, safe and popular.

The conventional or panoramic hysteroscopy can be performed with a 5 mm equipment without anaesthesia or analgesia through an undilated cervix as an office procedure. CO<sub>2</sub>, 5% dextrose in water and hyskon (32% high molecular weight (70,000) dextran in 10% dextrose) are commonly used distension media. CO<sub>2</sub> gives a wider and clearer field of view but should *never* be used without special equipment devised to control the rate of flow and intrauterine pressure. CO<sub>2</sub> insufflators meant for laparoscopy can prove fatal if employed to produce pneumometra for hysteroscopy. Hyskon is biodegradable and does not mix with blood. It can occasionally lead to allergic reactions, is not available in our country and demands special after care of the

hysteroscopic equipment. Five per cent dextrose in water can be used with satisfaction though its outflow from the cervix produces messy inconvenience. Surgical procedures need an 8 mm instrument with operating channel and are better performed under general anaesthesia. Operative hysteroscopy involving cauterisation and/or sharp cutting is better performed under the safety of laparoscopic control. Hysteroscopy concurrently performed with laparoscopy is now being advocated as a useful investigation for infertility.

Interpreting what you see through a hysteroscope needs far greater expertise than that needed for interpreting what you see through a laparoscope. Much experience is needed to appreciate the normal cyclical changes of the endometrium and to evaluate different benign and malignant pathologies developing there in. Hysteroscope is no doubt very valuable in cases of abnormal uterine bleeding, amenorrhoea and habitual abortion. The value of hysteroscopy with targeted endometrial biopsy in abnormal uterine bleeding is proved beyond doubt. It is superior to D & C and hysterosalpingography. Considering the fact that 20-25% of the endometrial surface escapes traditional curet-

tage, some clinics have completely replaced D & C for abnormal bleeding by hysteroscopy. Hysteroscopy can also evaluate uterine scars following caesarean section, myomectomy, utriculoplasty etc. It is indispensable in locating and retrieving intrauterine foreign bodies and IUCDs. Its routine use in every case of infertility, though advocated by some, is not widely accepted. Techniques are being evolved for the excision of submucous fibroids with the operating hysteroscope. Exciting developments are taking place in the field of hysteroscopic sterilisation. Electrocauterisation and cryo-cauterisation have lost their adherents due to obvious risks involved. Injections of occlusive agents like quinacrine, methyl cyanoacrylate and gelatin resorcinol formaldehyde are being pushed out by formed-in-place silastic plugs, rigid plastic plugs, porous ceramic plugs etc. None of them have yet presented acceptable failure rates and the promised ready reversibility is still a dream. There are serious doubts about the adaptability of hysteroscopic sterilisation to mass sterilisation programmes.

Hysteroscopy in experienced hands is a safe procedure. It should not be performed in the presence of pelvic inflammation and in invasive cervical malignancy. Immediate postmenstrual period is the ideal time for hysteroscopy. Uterine bleeding and pregnancy are relative contraindications. Cervical stenosis may

make hysteroscopy impossible. Apart from complications due to anaesthesia and due to distending media, infection, cervical laceration, endometrial trauma, uterine perforation, intrauterine adhesion resulting from a false passage in the uterine wall and rupture of the hydrosalpinx are some of the reported complications. Operative hysteroscopy and hysteroscopic sterilisation carry their own special risks.

Contact hysteroscopy and microcolpohysteroscopy are recent developments. The former can be performed by Hysteroser which needs no external light source, except for documentation, and no distention media. It is simpler to perform but needs more experience to interpret the observations. Examination can be carried out even in the presence of bleeding but operative procedures are obviously not possible. The versatile micro-colpohysteroscope developed by Hamou can be used for either panoramic or contact examination and also for operative work. Besides, it offers four magnifications viz x1, x20, x60 and x150 to observe superficial cellular layer of the cervical canal and uterine cavity.

Not long ago hysteroscopy was referred to as a procedure in search of an indication. Today its value as a diagnostic tool and operating gadget in many a gynaecological problems is proved beyond doubt and the horizons of its application are widening. Used with caution it is safe and very rewarding.