

ENDOMETRIAL RESECTION : A STUDY OF 53 CASES

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SUMMARY

Fifty-three patients between the ages of 39 and 51 years underwent endometrial resection for therapy resistant uterine bleeding. A pre and post operative histopathological study of the endometrium was done. The patients were followed upto 12 months with diagnostic hysteroscopy and ultrasonography. The patient satisfaction with the procedure was high and amenorrhoea or significant reduction in uterine bleeding was obtained in 51 patients. This procedure can be a useful alternative to hysterectomy in patients with persistent uterine bleeding unresponsive to medication.

INTRODUCTION

Menorrhagia, defined as unacceptably heavy or prolonged menstrual blood loss, is a common complaint of women during their reproductive years. Upto a quarter of these patients suffer from iron deficiency anaemia. In the majority of the cases no pathology can be found. The management traditionally relies on symptomatic treatment with medications like progesterone, antiprostaglandins, danazol, GnRH analogues, etc. In a significant number of cases, the persistence

of symptoms or the side effects of medications bring the patient and the gynaecologist to consider hysterectomy as a definitive treatment.

A large number of hysterectomies are performed for menorrhagia annually, which is not only expensive but is also associated with risks of major surgery and post-operative complications. The removal of the uterus, moreover, is felt deeply not only as the loss of reproductive capacity, but sometimes as the loss of femininity and sexuality. Also patients with obesity, cardiovascular diseases, renal failure etc., may be considered as

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too high a risk of hysterectomy.

An alternative to hysterectomy was thus essential. This was found in the selective destruction of the endometrium initially using agents such as quinacrine, methylcyanoacrylate, intracavitary radium etc., all of which have now been abandoned. Goldrath M.H. et al 1981 described endometrial resection using Nd. Yag laser as an alternative to hysterectomy for the control of excess uterine bleeding in patients where other modalities of treatment have failed, are contraindicated or are otherwise undesirable.

Vaincaille (1989) and Townsend (1990) prefer using a roller ball electrode and coagulating the endometrium. Some, like Neuwirth (1988) use the loop electrode for resection. We, in our study, have used a combination of the above 2 methods.

This has now become a popular method of treating therapy resistant uterine bleeding. Because of the fear of leaving islands of endometrium behind intrauterine adhesions and hence concealing the symptoms of early endometrial carcinoma, the authors have carried out this study to assess the uterine cavity at regular intervals of time post-operatively.

MATERIAL AND METHODS

Fifty-three women between the ages of 39 and 51 years underwent endometrial resection. They all presented with therapy resistant uterine bleeding, but had some contraindications for hysterectomy. In Baggish's (1988) study 5% of the females chosen for endometrial resection had major clotting abnormalities as their principal diagnosis. In our study, the

contraindications for hysterectomy were as follows (Table I).

Table I

Contraindications for Hysterectomy

	No. of cases
Obesity	3
Cardiovascular disease	2
Refusal of hysterectomy	48

A few weeks prior to the intervention they all underwent a diagnostic hysteroscopy with eyedirected and Novak biopsies. A vaginal ultrasound was performed to assess the uterine volume, the muscle wall and endometrial thickness. No malignancies were found during this screening (Table II).

Table II

Preoperative Histology

	No. of cases
Secretory endometrium	16
Proliferative endometrium	24
Hypotrophic endometrium	2
Polypoid endometrium	3
Simple hyperplasia	8

The patients had no further pregnancy wish and were fully informed about the procedure. In this series no drugs were given preoperatively to suppress the endometrium. All the procedures were performed under general anesthesia. The instruments used were the KarlStorz GmbH uterine resection set which includes :

- Myoma resectosoper (26 Fr) according to Hamou

- 30° Fore-oblique telescope
- Loop and roller ball electrodes
- Hamou hysteromat pump
- Autocon-Gyn
- Cold light source (250 W) and flash unit
- CCD video camera

A cutting current was used for the resection and 1.5% glycine was used for distention. The intrauterine pressure was maintained between 70 and 80 mm Hg, carefully controlled by the Hamou Hysteromat.

An initial cut was made through the entire endometrial thickness on the posterior uterine wall and this was used as a reference point for the ablation of the rest of the endometrial cavity. If the fundus was difficult to respect, the roller ball was used.

The total theatre time varied from 35 to 60 minutes. The amount of distension medium used was 2300 ml on an average, with a fluid loss of about 100 ml. All patients were discharged 6-9 hours post-operatively. At the 3, 6, 9 and 12 month follow-up, an out-patient hysteroscopy and biopsy and vaginal ultrasound were done.

RESULTS

The pathological reports of the resected tissue showed normal endometrium with fragments of underlying myometrium in 52 cases (98.1%). They included evidence of adenomyosis in 25 cases (47.2%). In one of the cases a carcinoma in situ was diagnosed, though the pre-operative pathology had shown adenomatous hyperplasia. This patient

preferred a hysterectomy, which was subsequently performed. Bleeding after the operation was moderate and persisted for one to two day.

Twenty-one patients were lost to follow-up.

At Three Months

Thirty-one patients presented for the 3 month follow-up. Eleven of these had become amenorrhoeic following resection. Twenty-eight of these patients were satisfied with the procedure while 3 were unsatisfied due to persistent bleeding. One of these patients is scheduled to have another endometrial resection.

At hysteroscopy 7 normal cavities were diagnosed.

Three patients had an occluded cavity due to massive intrauterine adhesions and 21 patients had few adhesions within a tubular uterine cavity.

Ultrasound findings corroborated with those on hysteroscopy.

At Six Months

Of the 22 patients who presented themselves, 4 were amenorrhoeic. Twenty-one were satisfied and only 1 had persistent bleeding, who is also scheduled for a repeat endometrial resection.

Hysteroscopy showed 6 normal cavities, major adhesion formation within a tubular cavity in 15 cases while in 1 case hysteroscopy was not possible due to extensive cervical scarring.

Ultrasound corroborated with the hysterectomy findings and in 1 patient the uterine cavity could be seen where a hysteroscopy had been impossible to perform. One of the patients with a

normal uterine cavity, but in amenorrhoea, became pregnant.

At Nine Months

Of the 13 patients who presented, 2 had amenorrhoea. All the patients were satisfied with the procedure. Hysteroscopy revealed tubular cavities still very white due to scarring in 7 cases, while a normal cavity was seen in 5 cases. Out-patient hysteroscopy was not possible in one patient due to extensive scarring.

At Twelve Months

Of the 8 patients who were seen, 4 were in amenorrhoea. All the patients were satisfied with the procedure. A tubular cavity starting to look pinkish in colour at hysteroscopy was seen in 3 cases. In the others the cavity looked normal.

All the eye-directed biopsies showed necrotic tissue impossible to interpret or endothelial tissue as a consistent feature.

CONCLUSION

This study shows that patient satisfaction with the procedure is very high and amenorrhoea or significant reduction in uterine bleeding was obtained in all but two patients. This compares favourably with DeCherney's (1987) study in which all except one patient developed amenorrhoea post resection.

The uterine cavity became atrophic and hysteroscopy revealed extensive scarring with very white tissue upto a period of about 9 months, after which the tissue became more pink. It is therefore our opinion that the scarring and hence the reduction in uterine size is assessable

only after 9 months. In patients where hysteroscopy could not be performed due to excess scarring, a hysteroscope with a smaller diameter or a flexible hysteroscope can be used.

Ultrasound has proved itself to be a useful alternative in the follow up study especially if hysteroscopy is not possible. Ultrasound also revealed that tubal patency may persist even after 1 year, hence patients have to be warned that endometrial resection is not a method of sterilization. In fact we had a spontaneous pregnancy 9 months after the endometrial resection.

If proper technique and instruments are used, endometrial resection can become a safe alternative to hysterectomy in cases of drug resistant uterine bleeding. The benefits to the patients are many reduced hospital stay, minimal discomfort and pain, and early resumption of work. As regards the risk of endometrial carcinoma remaining unrevealed for a long time, our study shows that in the vast majority of patients, the uterine cavity is not occluded hence early symptoms of intracavitary pathology can be detected.

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