

LARGE SERIES OF T.C.R.E. ON UNPREPARED ENDOMETRIUM

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SUMMARY

Modified three step T.C.R.E. done on a large group (282) of Menorrhagic women done without any prior endometrial preparation except done preferably post-menstrual had good results (82%). Further these avoided extra expenditure and side effects of the drugs used for pre-operative preparation. This three step technique of T.C.R.E. can make endometrial resection available to a larger group of women, who have menorrhagia but cannot afford or desire preoperative preparation.

There was a marginal increase in the amount of fluid used and the operating time. However in cases of large uterine myomas, preoperative with GnRH agonists is useful.

INTRODUCTION

Menorrhagia is a common complaint in elderly women, for which no obvious cause is found in more than 50% of patients. Treatment with drugs like progesterone, oral contraceptives, prostaglandin synthetase inhibitors is often ineffective or intolerable because of side effects and patients are unwilling for a prolonged drug therapy. D & C for so

long was the standard treatment, which if ineffective, hysterectomy was performed. Hysterectomy is a major surgery with its share of minor and major complications and an occasional mortality. Wingo et al 1985 reports 6:10000 mortality in hysterectomy done for benign conditions.

Hysteroscopic transcervical resection of endometrium has been evaluated extensively by Goldrath et al (1981), Decherney et al (1987), Magos et al (1991), Donnez

et al (1989) and many others. Most of the TCRE are done with preoperative endometrial preparation with various drugs like GNRH agonists, Danazol, progesterone etc. presuming that such preparations are necessary.

In our prospective study of 282 cases of hysteroscopic endometrial resections, we have 90% of the cases with unprepared endometrium except that they were done preferably post-menstrually.

MATERIAL & METHOD

In an ongoing prospective study from November, 1991 onwards at a Private Gynaecologic endoscopy Surgery Centre, Bombay, Rajawadi Municipal Hospital, Bombay and at Hysteroscopic Surgery Workshops done at various Hospitals in India by a single operating surgeon, 282 patients of abnormal or excessive uterine bleeding were treated with Videohysteroscopic Transcervical resection of endometrium (T.C.R.E.). A 26 French Gauge continuous flow resectoscope with a 4mm 30 forward oblique telescope and a passive handle mechanism was used.

A three step resection was performed in all, first fundus and periosteal region was ablated by roller ball set at 80 watts for coagulation followed by total endometrial resection with cutting loop with pure cutting current set at 100- 125 watts. Occasionally 2-3 layers of resection was necessary, specially for anterior and posterior walls as endometrium was thick. Finally after removing chips, full cavity was treated by roller bar/barrel (3mm) set at 80 watts for coagulation. This had additional haemostatic effect and added necessary damage to the basal layers.

Distension of the uterine cavity was by 1.5% Glycine in 1 or 2 ltr. bottles with pressure cuffs, C- infusor pump, Quinone's pump or Hamou's hysteromat at 100-120 mm of Hg, inflow pressure or occasionally higher. The outflow tubing was connected to suction at 40-50 mm of Hg. A monochip camera and a 14" TV monitor was used in all cases.

Simultaneous myoma resection was done in 48 cases and 3 cases had septate uterus which was also incised for better access.

PATIENT STATISTICS

62% of the cases had menorrhagia, 18% had metrorrhagia, 8% had polymenorrhagia, 12% had postmenopausal bleeding. 18% of these cases had dysmenorrhea also. The youngest patient was 32 years old and oldest 58 years old. Tube ligation was done in 38% cases earlier and in 8% we did TCRE with tube ligation. 12% had history of previous caesarean section. High risk medical problems like hypertension, diabetes mellitus, gross obesity were present in 22% of the cases. 67% of the cases were done under general anesthesia and 33% under spinal or epidural anaesthesia.

Resected material was removed with ovum forceps or old fashioned flushing currette.

Monitoring of the amount of Glycine absorbed was kept. Injectable antibiotics were given preoperatively and post operative oral antibiotics and mefenamic acid were given for 2-3 days.

Uterine size was less than of a 10 weeks pregnancy and intracavitary fibroids were less than 6 cms. in size.

RESULTS

Amenorrhoea and scanty periods were considered as results and were noticed in 38% & 44% respectively. Normal periods resulted in 6%, 8% had failure and 4% were lost to follow up. 18% of the patients had simultaneous myoma resection with 90% good results and 10% failure. Average operating time was 32 mins. (22-88 mts.) Large volume of glycine was necessary in cases of large myoma resection with no preoperative preparation. The average amount of Glycine absorbed was less than 500 ml, in 88% between 500-1000ml. in 7%, between 1000-1500mls. in 3%, more than 1500ml, in 2%, with around 2000ml. in 2 cases. Injection furesemide 20 mg. I. m was given in 3% of the cases. The average amount of tissue removed was 9 gram (3-42gms) in 4 cases Foleys bulb tamponade in Utero was necessary for 6-7 hrs. One patient had excessive bleeding which needed blood transfusion. In this case, resection was a little deeper

at the isthmic region. We had 2 cases of uterine perforation, both with dilators, one treated conservatively and the other wanted a hysterectomy. In one patient there was significant drop in pO₂ to 75 mmHg with transient significant hypertension even when total fluid discrepancy was 700ml. 2 Patients had ketamine related changes in behaviour & transient blurring of vision.

Post operative altered discharge was noticed for 1-5 weeks. 80% of the cases were discharged on the same day and the remaining on the next day.

Satisfaction rate was 88%; few cases in spite of improvement in menorrhagia were disturbed by irregular discharge for few weeks.

Repeat endometrial resection done in 4% cases was easy and usually ablation was better than resection with 90% effectivity in treating menorrhagia.

DISCUSSION

Hysteroscopic Endometrial resection

Comparative Results with Different Studies

	Cases	Amenorrhoea	Improvement	Not improved	Repeat	Percentage
Maher & Hill 1990	100	21%	95%	3		
Magos et al 1991	250	27-42%	92%	8		
pyper & Haeri 1991	80	6-8%	81%	19	19%	5%
Decherney et al 1987	21	95%	5%	20%		
Townsend et al 1990	50	40%	40%	20%		
Vancaillie 1989	15	67%	26%		7%	
Present Series 1994	282	38%	82%	10	2%	8%

as an alternative to hysterectomy in menorrhagias has been accepted. Rutherford et al (1991) found that 58% of patients currently treated by hysterectomy would be suitable for endometrial resection.

In the present prospective study we evaluated whether preoperative preparation is necessary, since most of the studies so far are done with preoperative GNRH agonists, Danazol, progesterone etc., presuming that such preparations are necessary. However no large series is available on unprepared endometrium. In the current study 90% of the patients were unprepared and the authors didn't find significant difference in outcome compared to those patients who had preoperative preparation.

COMPARATIVE RESULTS WITH DIFFERENT STUDIES

2% of Maher & Hill's & 4% of present review were lost to follow up. There was no major difference in fluid overload, uterine perforation, bleeding, during or after surgery and failure rate.

However there were at least 62% of the cases in our study who needed 2 or 3 layers of resection since endometrium was thick. A full cavity ablation with roller bar/barrel after resection could be contributory to better results.

In patients of concurrent hysteroscopic myomectomy, however we felt that large volumes of glycine was used (average 8.6 ltrs) with maximum of 14.9 ltrs. and had increased absorption rate (Average 900ml.) with occasional 2 ltrs. In patients with large intracavitary myoma preoperative preparation with GNRH agonist would be beneficial.

Healy et al (1984) and Donnez et al (1984) have reported average 38% shrinkage in size of myoma by GNRH agonist. Decrease in size, was greater when uterine cavity area was more than 10 cm². Occasionally myomectomy was done in two sittings.

RESULTS OF HYSTEROSCOPIC MYOMA RESECTION :

1. Hallez (1987) - 93% improvements in menstrual symptoms.
2. Brooks et al (1989) - 91% improvement of menorrhagia in 52 patients.
3. Loffer (1990) - 93% improvement of menorrhagia in 53 patients.
4. Wamsteker - 91% improvement of menorrhagia in 49 patients.
5. Present series - 90% improvement of menorrhagia in 48 patients.

There is one study by Serden et al (1991) which compares different preoperative endometrial resection-ablation. Leuprolide 7.5 mg was given in late luteal phase and TCRE was done after 4-5 weeks or Depo medroxyprogesterone acetate 200 mg. I.M. or danazole 400 mgm twice a day for 6-8 weeks before surgery or no preparation at all. In the last group good results were seen in 89%.

These findings are consistent with our study of unprepared endometrium. Transcervical endometrial resection had 82% improvement in menstrual complaints with 38% having amenorrhoea.

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