

# HYSTEROSCOPIC RESECTION OF INTRAUTERINE SEPTUM

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## SUMMARY

The septate or subseptate uterus is a potential cause of reproductive failure and only cause in some. If a uterine septum is the only defect, hysteroscopy should be performed to accomplish easy resection.

Hysteroscopic metroplasty should replace the other methods of therapy for the patients with symptomatic septate uterus, as it is having comparatively low morbidity. The procedure is faster, safer and permits more rapid recovery with faster conception, vaginal delivery. A series of 10 patients with bad obstetric history and/or infertility is presented where the intrauterine septum was excised hysteroscopically. Its place is discussed in detail.

## Introduction

Failure of medical absorption in embryologic development results in the persistence of midline septum. Although it is found most commonly in the uterine fundus, the septum may extend through the cervix and into the vagina. The presence of a uterine septum may be associated with malpresentations, premature labour, spontaneous abortions and infertility. It is for the latter that therapy is usually considered.

Transcervical therapy for the septate uterus is not a new concept. Hirsh (1919)

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reported the incision of the uterine septum in a patient subsequently conceived, carried to term and delivered vaginally. Luikart (1936) described the transvaginal incision of septa. The patient conceived, carried to term and delivered vaginally. Despite these successes, transcervical metroplasty was eclipsed by abdominal procedures. The abdominal metroplasty is associated with the operative and postoperative morbidity of laparotomy, including risk of pelvic adhesion formation hindering fertility besides subsequent deliveries usually by caesarean section. Despite these drawbacks, abdominal metroplasty has been the treatment of choice for four decades. Hysteroscopic metroplasty represents the resurgence of the transcervical technique and should get its due recognition.

### **Material and Method**

We have studied 10 cases from June 1987 to June 1989-90 from a private hospital and one from K.E.M. Hospital. All presented with repeated pregnancy losses.

All were investigated in the form of routine blood, uterine examination, husband's semen examination, hysterosalpingogram, and pre-menstrual D&C with laparoscopy. All the other investigations were found to be normal and therefore intrauterine septum was considered as the cause of pregnancy losses.

Patients were admitted in the morning on the day of operation with necessary pre-operative preparation. Under general anaesthesia, hysteroscopy was carried out. Complete exploration of the endocervical canal and the cavity were done. The septum was clearly identified and assessed. Thereafter, the scissor was passed through the operating channel of the hysteroscope (identified close to the septum). The resection of the septum was done under laparoscopic control which was introduced soon after hysteroscopic findings were obtained. The septum usually consisted of a fibroelastic band that resects quite easily with scant bleeding. Bleeding is insignificant and never interfered with procedure. The septum is cut by three to five strokes of scissors. Laparoscopic control for warning to prevent perforation and trauma. A feel with hysteroscope or curette (introduced after removing hysteroscope) keeps to identify the residual septum or its base which can be excised through a hysteroscope. Hysteroscope is then withdrawn.

An intrauterine device, a Lippes Loop was inserted into the cavity and patients were postoperatively given antibiotics and

conjugated oestrogen 5 mg per day for 6 to 8 weeks adding progesterone 10 mg. per day in last 7 days. After withdrawal bleeding the intrauterine device was removed and after two menstrual periods; later repeat hysterosalpingogram was performed to evaluate the results.

### **Results**

Comparison of pre-operative and post-operative hystero-grams in all the ten patients except two have shown normal uterine cavity shape and not a slightest suggestion of bicornuate or septate uterus. In two, residual septum or base of few mms. remained. In one of them, it was excised to result in the normal shape.

### **Complications**

When the appropriate technique and selection of the patients are observed by an experienced hysteroscopist, hysteroscopy is practically devoid of complications.

1. Uterine perforation may occur which can be prevented by advancing the instrument gently under direct vision.
2. Infection
3. Uterine bleeding
4. Medium related complications.

### **Reproductive Outcome.**

Raw pregnancy rate studied by Israel and March (1987) is 92%. 80% of completed pregnancy has gone to viability and 73% to term, while primary caesarean section rate is 20%. The pregnancy rate studied by Rock and Jones (1977) by abdominal metroplasty route is 77% with a high number of caesarean section rate primarily used for the previous laparotomy.

Since our study is of the last two years, reproductive outcome is incomplete and material is presented as a pilot study. However, results of Israel and March (1987) prove beyond doubt the favourable results.

### Conclusion

Hysteroscopic resection of the uterine septum has several advantages over the more commonly used abdominal surgical approaches. Post-operative morbidity, discomfort and adhesions are greatly reduced. Tubal function is not interfered with and no subsequent gynaecological abnormalities are encountered. It allows to attempt to conception sooner and subsequently delivered by a vaginal route.

While abdominal metroplasty is a major operation with longer hospital stay as well as away from home and job, increased associated morbidity, need for caesarean section and potential risk of secondary infertility, chronic pain and even

incisional hernia. However, there are limitations to the hysteroscopic metroplasty like wide septa, no guarantee of benign obstetric course for all patients, continued risk of premature labour due to other reason.

Hysteroscopic resection of the uterine septum is a positive and worthwhile approach for all patients with reproductive failure by reducing surgical trauma considerably, shortening hospitalisation and reducing morbidity as well as aftermath. It should replace other methods of therapy for all the patients with a symptomatic uterine septum needing excision.

### References

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