

VIDEO HYSTEROSCOPIC INTRA UTERINE SEPTAL INCISION - AN IDEAL HYSTEROSCOPIC SURGERY

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SUMMARY

Traditionally when a patient presented with a Mullerian fusion defect thought to be the cause of her recurrent pregnancy losses, a Jones, Strassman or Tomkins utriculoplasty was performed resulting in increased operating times, lengthy anaesthesia, blood loss and infections.

Video hysteroscopic intrauterine septal incision is an effective and simple procedure.

48 patients of intrauterine septae were treated by hysteroscopic incision with Collins knife & pure cutting current of 60-80 watts. The instrument used was a 26 F Gauge continuous flow Urologic resectoscope. Distension medium was 1.5% glycine created by pressure cuff, Quinone's pump or hystero-mat.

Amongst those patients operated for complete septum, 73.3% had a full term delivery and in those treated for incomplete septum 80.6% had a full term delivery.

Average operating time was less than 20 minutes. Most of the patients (79.17%) were discharged on the same day. Recovery was rapid and there were no major intraoperative or postoperative complications.

INTRODUCTION

Although the incidence of a 2 chambered uterus approaches 2% in the general

population, only a relatively small proportion of cases has been associated with reproductive wastage (Ashton et al 1988).

Traditionally, when a patient presented with a Mullerian fusion defect that was thought to be the cause of her recurrent

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Accepted for Publication on 28.04.1994.

pregnancy losses, a Jones, a Strassman or Tomkins utriculoplasty was performed by laparotomy. These procedures required lengthy anaesthesia. Surgery could be complicated by infection, or haemorrhage necessitating antibiotics and blood transfusions. Also, because the full thickness of the uterine fundus was surgically damaged, the patients had higher chances of caesarean section. Some women were made infertile as a result of adhesion formation or tubal occlusion secondary to the procedure itself.

Most Mullerian fusion defects are amenable to hysteroscopic treatment and hysteroscopic incision of intrauterine septae has been successfully accomplished with electrocautery.

In the following study, transcervical video hysteroscopic incision of intrauterine septae was performed resulting in a marked improvement of pregnancy outcome.

MATERIAL AND METHODS

In the current study, 48 patients of intrauterine septae were treated by hysteroscopic incision with Collins knife and pure cutting current of 60-80 watts at a Private gynaecologic endoscopy surgery Hospital and Rajawadi Municipal Hospital, Bombay over a period of 2 years.

All patients were diagnosed on hysterolaparoscopy and hysterosalpingography was supplementary.

The instrument used was a 26 F Gauge continuous flow Urologic resectoscope with Collins knife.

The distension medium used was 1.5% glycine, either by pressure cuffs, Quinone's

pump or hysterosomat.

In the initial 15 (31.25%) patients concomitant laparoscopy was done as a rule. In the remaining 33 patients simultaneous need for laparoscopy was not found to be necessary even in the presence of a wide septum. Division of septum was done from below upwards with Collin's knife and cutting current. Division was done till both tubal Ostia were seen equidistant in line with fundal region. The surgery was done in the proliferative phase and oestrogen was given post operatively for 4 weeks with progesterone being added in the last 5 days.

RESULTS

Majority of the patients were between 26-30 years of age (54%).

Table I shows the previous obstetric history of our patients. 45.8% of the patients presented with 3-5 abortions, 10.4% were infertile, referred from I.V.F. centres, 22.9% presented with previous preterm deliveries. 4.2% of the patients had previous full term deliveries, in whom septum was discovered coincidentally while doing transcervical endometrial resection.

Table II shows the type of septum. 68.75% of patients had an incomplete septum, 31.25% had complete septum and there were 2 cases of uterine septum with vaginal septum (4.17%).

Table III shows the amount of glycine used. In 58% of the patients, it was less than 1 litre. The average time taken was 10-20 mts. (64.58%).

Table IV shows the pregnancy outcome in patients desiring conception.

Table I
Previous Obstetric History of Patients

Prim. Inf.	Abortion	Preterm Del	Full Term Del.
2	3-5	5	
5	6	2	11
(10.45)	(12.5)	(45.8)	(4.2)
		2	11
		(4.2)	(22.9)

Figures in bracket indicate percentage.

Table II
Type of Septum

Complete Septum	Incomplete Septum
15 (31.25)	33 (68.75)

Figures in bracket indicate percentage.

Table III
Amount of Fluid used

Amount	Number
1 L	27 (58)
1-1.25 L	16 (34)
1.25-1.5	5 (8)
	48

Figures in bracket indicate percentage.

Table IV
Pregnancy outcome in patients desiring conception

	Complete Septum	Incomplete Septum
Abortion	1 (6.67)	3 (9.6)
Preterm Del.	1 (6.67)	1 (3.2)
Full Term Del	11 (73.33)	25 (80.6)
Lost to follow up	2 (13.33)	2 (6.45)
	15	31

Figures in bracket indicate percentage.

Amongst those patients operated for complete septum, 73.3% had a full term delivery.

Amongst those patients treated for an incomplete septum, 78.79% had a

full term delivery.

There were no major intraoperative or postoperative complications. In one (2.08%) patient there was bleeding per

vaginum following procedure, for which prophylactic foleys catheter was inserted in the items.

Follow up hysterosalpingography was done in 15 (31.25%) patients 2 months after the procedure. This revealed a normal uterine cavity with no adhesions. Follow up hysteroscopy in 3 patients (6.25%) revealed normal cavity with flimsy adhesions.

DISCUSSION

Pregnancy losses with the septate uterus, classically occur between 8-16 weeks of gestation. Poor implantation dynamics because of reduced blood supply to the septum has been accepted as causal without actual verification.

A complete uterine septum is associated with an even higher pregnancy loss as compared to incomplete or partial uterine septum. Buttrams and Gibbons (1979) reported a 70% foetal loss in those patients who had a partial septate uterus versus 80% pregnancy loss in patients with a complete septate uterus.

It was recommended by Mattingly and Thompson (1986) that all patients who had undergone metroplasty, be delivered by elective Caesarian.

The sole indication of a septal incision is a poor reproductive performance. Septal metroplasty is not indicated as a treatment of infertility perse (Rock and Jones 1977; Corson, 1992).

Hysteroscopic metroplasty was originally introduced by Edstorm in 1974. Several years later, Fayez (1989) compared classical Tomkins laparotomy procedure with the hysteroscopic metroplasty between 2 groups of patients

with a recurrent pregnancy loss and revealed a 71.4% pregnancy rate in the laparotomy group versus an 84% rate after the hysteroscopic procedure.

The results in a study conducted by Daly et al (1989) were particularly impressive. In a total of 150 pregnancies in 55 patients before repair, only 7 pregnancies went to term (4.67%), with 10 living children in the entire group. After surgery, 51 patients were followed : 47 women had a total of 79 pregnancies in which 15 had an abortion 5 had premature deliveries and 55 had term pregnancies (69.62%). The total number of living children for the group was 58. Therefore there was a remarkable improvement for term pregnancies from 4.67% to 69.62%. In our study we had successful results with hysteroscopic metroplasty. Amongst those patients who were operated for complete septum, 73.3% had a full term delivery, 6.67% had an abortion, 6.67% had preterm delivery. In those patients treated for incomplete septum, 80.6% had a full term delivery, 6.9% had an abortion & 2% had a preterm delivery.

Morbidity has been low in all the published series and primarily is limited to occasional bleeding controlled with intrauterine balloon and to perforation without sequelae. (Corson, 1992).

CONCLUSION

Trans-cervical video hysteroscopic septal incision is an effective and safe procedure for treatment of intrauterine septum. It is as effective as laparotomy and is associated with decreased morbidity, faster recovery and a shorter

hospital stay. It also decreases the cost to the patient, avoids higher chances of caesarean section associated with pregnancy after metroplasty.

In today's age of advanced hysteroscopic surgery it's not justifiable to do open metroplasty for intrauterine septum causing repeated abortion since video hysteroscopic septal incision give equally better results with insignificant morbidity.

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A CASE OF SUBUR
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HYPOTHESIS IN
A POST-OPERATIVE
MEDICAL PATIENT