

## Parous Septate uterus: to treat or not to?

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### **ABSTRACT**

Mullerian duct anomalies are the most common congenital anomalies of the reproductive system and septate uterus is the most frequently diagnosed Mullerian anomaly. The true incidence of Mullerian duct anomalies is difficult to state because some cases may be asymptomatic and there are pitfalls associated with various diagnostic methods. (1) Septate uterus is the most common cause of uterine anomaly and has the highest reproductive failure rate.

In this study, we have 4 case reports of patients presenting with different problems in the OPD of Cama and Alless hospital in whom septate uterus was incidentally diagnosed during various operative procedures. Septate uterus may present with altogether different symptoms. To treat or not to is the dilemma we are addressing in this presentation

**Key words:** septate uterus, hysteroscopy

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### **INTRODUCTION**

Mullerian duct anomalies are the most common congenital anomalies of the reproductive system and septate uterus is the most frequently diagnosed Mullerian anomaly. The true incidence of Mullerian duct anomalies is difficult to state because some cases may be asymptomatic and there are pitfalls associated with various diagnostic methods [1]. Septate uterus is the most common cause of uterine anomaly and has the highest reproductive failure rate. The incidence of uterine defects in the general population and in infertile women is 4.3% and 5–25% in women with recurrent pregnancy loss [3,4 &5]. There are different methods for the diagnosis of septate uterus among them are ultrasonography, MRI, hysterosalpingography, hysteroscopy and hysterolaprosopy. However hysterolaprosopy is considered as the gold standard definitive diagnosis as even hysterosalpingography has the pitfalls in that it cannot differentiate between bicornuate and septate uterus [21]. Intravenous pyelogram is recommended in about 20%-30% of women having associated urologic abnormalities [2]. Evidence regarding uterine anomalies is based on their clinical presentation. However we do come across some mullerian anomalies that are diagnosed incidentally. In such cases where the pathology is not related to main clinical symptom, question remains – do they need surgical intervention?

In our clinical setting, we have a series of 4 interesting case reports of patients presenting with different in the duration of 6 months in whom septate uterus was incidently diagnosed during various operative procedures. We are presenting our views on managing such cases.

### **CASE REPORT**

#### Case 1-

28 yrs gravida two, para one and live one with full term gestation with previous section done 2 yrs back for breech presentation was operated for lower segment cesarean section in view of nonprogress with prolonged premature rupture of membrane. She had an emergency caesarean section and delivered a live male baby of 3.2 kg by breech. Intraoperatively, there was a uterine septum extending from the fundus to the corpus uteri, enlarged right cavity containing the present pregnancy and other cavity was pushed and collapsed on to one side. No attempt was made to remove septum.

**Fig 1- septate uterus during LSCS**



#### Case 2-

45 yrs P3L3 with 3 FTND with menorrhagia since 1 yr. Ultrasonography normal. She was on medical management for 3 months with no improvement. Posted for hysteroscopy with dilatation and curettage for investigation of menorrhagia. On hysteroscopy, a partial septa was found in the lower one third of the uterus and the upper part of the cavity was communicating. Endometrial sample was taken from both sides of the cavity. Since fertility was not a problem, septa was not removed.

Fig 2- laparoscopic view of septate uterus in a case of menorrhagia.



Case 3-

29 yrs para one living one with previous one LSCS done 3 yrs back for breech presentation was anxious to conceive and hence came for secondary infertility treatment. Her LH,FSH,S.PROLACTIN,husband's semen analysis was normal,hysterosalpingography showed bilateral tubal block with dilated and sacculated tubes. Diagnostic hysterolaparoscopy was performed and a complete septate uterus was found incidentally. Septal resection was not done as both tubes were dilated and sacculated and patient was unaffording and had a previous live full term pregnancy despite the septum. She was counselled considering tubal factor as a cause of infertility and septal resection might not improve her fertility unless she was planning assisted reproductive technique(ART)

Case 4-

35 yrs married since 2 yrs with history of medical termination of pregnancy 15 days back came to our out patient department for further investigation. On history, at 7 weeks of gestation, her dating scan had revealed a gravid 7 weeks uterus with two uterine cavities and the pregnancy in the right uterine cavity. She was counselled about the risks of poor reproductive outcome and hence she opted for medical termination of pregnancy. Plan is to investigate for other factors of subfertility before posting her for hysterolaparoscopy to confirmseptum and resect at the same time.

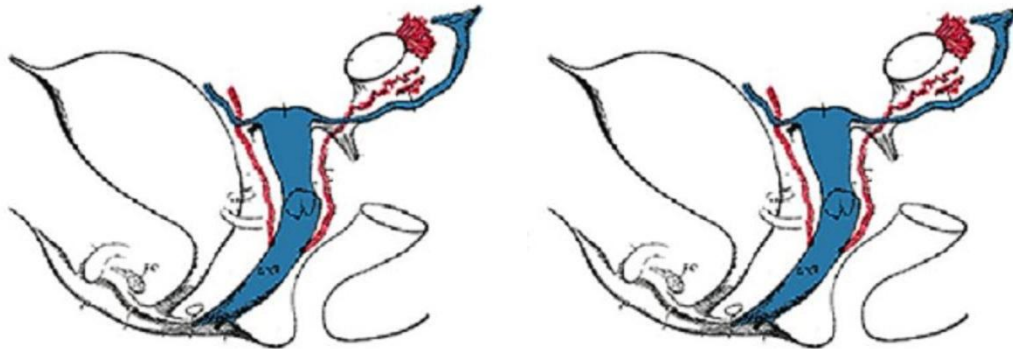
**DISCUSSION**

**EMBRYOLOGY:** At six weeks of fetal life both males and females genital tracts have paired paramesonephric (Mullerian) duct and mesonephric (Wolffian) ducts. In females the mesonephric ducts degenerate and by twelve weeks due to lack of testosterone and the Fig 3- ultrasonography picture of septate uterus



paired paramesonephric developed on lateral aspect of mesonephrons to reach urogenital sinus at nine weeks and unfused lateral arms of paramesonephric ducts forming fallopian tubes.

**Fig 4 & 5- differentiation of paramesonephric ducts.**



Septate uterus (class V, American fertility classification[9]) is the most common congenital uterine anomaly. Septate uterus may present with altogether different symptoms. To treat or not to is the dilemma we are addressing in this presentation anomaly, comprising approximately 55% of mullerian duct anomalies.[10]. Treatment of septum is done solely for the purpose of improving reproductive outcome.

A septate uterus is not a primary factor for infertility.[11] Nearly 40% of patients with septate uterus have reproductive failure, obstetrical complications and an increased incidence of recurrent miscarriages.[12] septate uterus are incidentally diagnosed during various diagnostic procedures like dilataion and curettage, hysteroscopy, cessaean section, manual removal of placenta, diagnostic laproscopy. As they are incidental ad not related to the presenting symptom, they are under report, hence it is difficult to obtain an exact incidence of such cases.

Mechanisms of septate uterus causing early pregnancy loss and infertility is not established.(14)The septum is thought to be composed of fibroelastic tissue with inadequate vascularization and altered relations between myometrial and endometrial vessels, thus exerting a negative effect on fetal placentation.[15] Grimbizis et al., retrospectively examined the reproductive performance of infertile patients before and after septum resection and found that septum resection does not impair fertility, both in sub-septate and complete septum post procedure.0.43 % of septate uterus has menorrhagia. There are incidences where septal fibroids have been diagnosed on hysteroscopy and in them hysteroscopic septal resection has found to be successful. reference Those like the first case where she did not present with any complaints at all and septa was seen at the time of cessaean section, it is quite clear that no intervention further is the best policy until such a time she presents with any problems in fertility. The options need to be discussed with the couple before embarking on resection as even without treatment, there is still a chance she might conceive as she has done in her previous pregnancy

In the second case where fertility was not a problem, menorrhagia can be difficult to investigate and treat as a good endometrial sampling is essential from both cavities before starting medical treatment. Hysteroscopic sampling might be more challenging. There are no reported cases of septal malignancy. The reason for this is probably because the septum has very minimal endometrial and myometrial tissue. So resection of septum which does show any gross pathology on hysteroscopy might be unnecessary. If parity is complete and she is in the perimenopausal, a definitive treatment such as hysterectomy might be safer if menorrhagia is not responding to medical management. However, if she is parous but young, monitoring and managing these patients might be a challenge.

In the third scenario, the decision to treat or not is not so clear. However, if all other factors for her secondary infertility have been ruled out, treating the septa might help improve her fertility. However informed choice is essential. There is enough evidence in the literature to support the fact that removal of septum improves pregnancy rates in women with bad obstetric history.[16,17] Homer et al. , in a review on septate uterus, combined data from several published series and reported that the incidence of spontaneous abortion and preterm delivery rate decreases significantly after metroplasty, whereas, the incidence of term delivery rate increases.(18)

Based on our experience of these above mentioned 3 cases, we personally feel that termination of pregnancy was not necessary as there was still a high chance of good reproductive outcome. However, as she presented to us after the MTP and was keen on getting the septum resected we have planned accordingly. In conclusion, septate uterus are not always symptomatic and hence does not have to be surgically treated in every case and the treatment should be tailored on individual basis.

### **CONCLUSION**

Based on our experience of these above mentioned 3 cases, we personally feel that termination of pregnancy was not necessary as there was still a high chance of good reproductive outcome. However, as she presented to us after the MTP and was keen on getting the septum resected we have planned accordingly. In conclusion, septate uterus are not always symptomatic and hence does not have to be surgically treated in every case and the treatment should be tailored on individual basis.

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