Vaginal Delivery in A Case of Longitudinal Vaginal Septum — An Interesting Case Report

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Introduction

Maldevelopment of the Mullerian ducts occurs in a variety of forms. The incidence varies from 2-3% in fertile women. The overall incidence is 0.16-10%. It is seen in 1% of the general population and 3% of those with recurrent pregnancy loss. The tubes and the uterus begin to develop from the Mullerian duct in the 7th week of intrauterine life. The vagina develops partly from the Mullerian duct and partly from the urogenital sinus.

Case Report

A 25 year old Mrs AB, primigravida married since seven years was admitted with 8 months amenorrhoea in preterm labour. She had PROM since 12 hours on admission. There was no significant positive personal, past and family history. Her last menstrual period was on 23rd of May 2007 and expected due date was on 2nd of March 2008. Thus the period of gestation by dates (Naegle’s rule) on visit was 32 weeks. She was antenatally registered. She had three previous ultrasound reports done at 14 weeks, 23 weeks and 29 weeks of gestation respectively. No foetal anomaly had been detected. Incidentally no Mullerian anomaly had been identified in any of the antenatal USG reports. By her first ultrasound she was 33 weeks of gestation. She was given Injection Betamethasone and antibiotics.

On general examination patient was underweight. On obstetric examination uterus was 30 weeks and appeared deviated to the left. Foetus was in longitudinal lie with cephalic presentation and foetal heart sounds were normal.

On per vaginal examination during labour a partial longitudinal vaginal septum was felt dividing the vagina from 12-6 O’Clock position not extending up till forchette. On the left of the vaginal septum, cervical rim was felt. Cervix was 8-9 cms dilated, 80% effaced, with vertex as the presenting part with occiput at 1 O’clock, station 0, membranes were absent and pelvis was adequate.

Decision was taken to give the patient a trial for vaginal delivery. Oxytocin was started after Injection Betamethasone action. Progress of labour was monitored. Active phase of labour was protracted with slow dilatation of cervix. At 12 noon cervix was fully dilated, station was at 0+1. At 1:15 pm station had descended to 1+. In view of prolonged second stage of labour decision was taken to divide the septum and apply forceps. Informed consent was taken. Patient was shifted to the operation theatre. A 2 cm incision was taken on the vaginal septum in the centre with local anaesthesia infiltration. After the station descended to +2 and occiput rotated to 12 O’clock outlet forceps was applied. A male child weighing 1.75 kg was delivered.

The patient was examined under anaesthesia under intravenous sedation. A vaginal septum was

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present from 12 – 6 O’clock position in the upper half of the vagina. On the left of the septum, the cervix was felt admitting two cm dilated, uterus was 18 weeks, well contracted, deviated to the left (left horn of uterus). On the right of the vaginal septum a nulliparous cervix was felt with a small right horn of uterus (normal sized to atrophic right horn).

The left cervix was traced. A cervical tear at 9 O’clock position was sutured. The two edges of the vaginal septum were sutured by continuous interlocking sutures of catgut. Episiotomy was sutured. Post procedure the patient’s haemoglobin was 8 g%. One pint of blood was transfused.

The baby was shifted to transient care unit in view of leaking per vagina for more than 48 hours and was given antibiotics. Baby developed physiological jaundice and was given phototherapy. Baby was shifted with mother on day seven.

Ultrasound done on day 10 postpartum confirmed presence of two uterine cavities (two separate horns) where the right horn was small and the left horn was bulky (post partum) along with two separate cervical canals. The ultrasound was suggestive of a bicornis bicornis uterus.

Uterus didelphys needs to be differentiated from bicornuate bicornis uterus. In uterus didelphys there is complete non fusion of the Mullerian ducts. In bicornuate uterus there is partial non fusion of the Mullerian ducts upto the internal os (unicollis) or upto the external os (bicornis).

In case of presence of two cervices and vaginal septum the condition may be easily diagnosed on per speculum or vaginal examination. Patients with a vaginal septum may present with difficulty in using tampon. In case one uterine hemicorpus is better developed than the other, intercourse generally occurs on the vaginal side connected to it. If intercourse occurs on the other side repeated abortions or infertility may result.

In case of absence of vaginal septum investigations for the uterine anomaly are not generally performed unless the patient is symptomatic or the obstetric performance has been tested. HSG has been useful to evaluate anomalies. The most common investigation is ultrasound. Newer 3 D ultrasound offers better visualization of uterine body than 2 D. It approaches the sensitivity and specificity of MRI. MRI is still the gold standard.

Uterus didelphys and a bicornuate uterus

Fig. 2 : TAS : right horn small and left horn bulky (post partum).
are associated with the best possibility of successful pregnancy. However, there is still a higher incidence of spontaneous abortions (43%), preterm birth (38%), breech and need for Caesarean section. Foetal survival rate is 54%. In a series demonstrating reproductive outcome after metroplasty a decrease in foetal loss was seen from 70-96% to 8-12%. In one case report, eight patients of uterus didelphys and recurrent abortion underwent Strassman's metroplasty. Follow up of five patients was possible. Four out of five had a living issue. However, there are only anecdotal reports and no randomized studies. Surgical metroplasty should be reserved on case by case basis.

References

Oral Health: Prevention is Key
Dentists who cluster in cities where populations that can afford treatment usually live, leaving rural areas deprived of even the most basic treatment dental care.

Prevention of oral disease is therefore key, largely possible, and should be a routine part of other health professionals' work.

What can be done? Daily use of fluoride is the most cost-effective. Water or salt fluoridation are possible population wide approaches.

Promoting the daily use of effective fluoride toothpaste is a more realistic strategy but its cost prohibits its widespread use in many low-income and middle-income countries.

Policies that address the risk factors for oral diseases, such as intake of sugars and tobacco use, can also be implemented, especially because these moves will help reduce chronic diseases.

Dental caries and related pain and sepsis might contribute to undernutrition and low weight and height in children in developing countries. Oral pain is also one of the most common reasons for school absenteeism.