IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 21, Issue 2 Ser.7 (February. 2022), PP 01-03
www.iosrjournals.org

Complete Transverse Vaginal Septum- Rare Anomaly.

DR.ABINAYA.R[1], DR.RAJESWARI K.S[2]
Department Of Obstetrics And Gynecology, Sri Ramachandra Institute Of Higher Education And Research, India[1].
Department Of Obstetrics And Gynecology, Sri Ramachandra Institute Of Higher Education And Research, India[2].

Abstract:
Transverse vaginal septum is one of the rare anomalies of the female reproductive tract. This is a case report of a 12 year old girl who presented with lower abdominal pain and hematocolpos. Rectal examination revealed a smooth pelvic mass. MRI showed transverse vaginal septum. Surgical resection of the septum was done along with split skin grafting. Postoperative vaginal dilatation was done to prevent restenosis.
Key Words: *Transverse vaginal septum, uterine anomaly, imperforste hymen, primary amenorrhea.*

Date of Submission: 02-02-2022 Date of Acceptance: 15-02-2022

I. Introduction

Transverse vaginal septum is one of the rare anomalies of female reproductive tract. It occurs only in 1 in 30000-70000 women[1]. Women with outflow tract obstruction have 46XX karyotype and normal secondary sexual characteristics. Transverse vaginal septum occurs from incomplete fusion between mullerian ducts and urogenital sinus. It can either be complete or incomplete septum. Complete septum usually presents with primary amenorrhea and hematocolpos. Patients with incomplete septum have normal menstruation but can have dysmenorrhea or dysparaneuia[2].

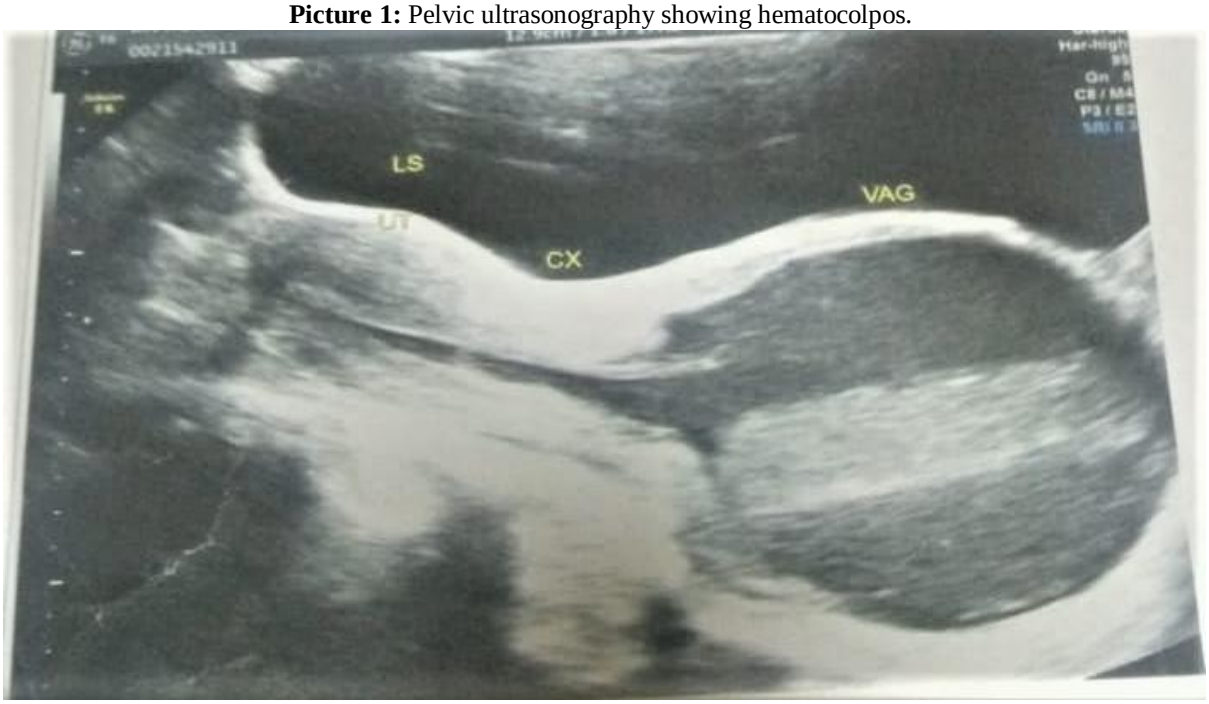
Here we present a case of 12 year old girl who presented with pain abdomen and recurrent hematocolpos who was diagnosed to have complete transverse vaginal septum.

II. Case Report

A 12 year old who hasn't attained menarche yet with history of pain abdomen on and off for 6 months. She visited an outside hospital visit, where MRI pelvis was done showed T2 hypointense collection of approximately 13x8x6 cm distending endometrial cavity and cervical canal. Bilateral ovaries and lower vagina appeared normal. Diagnosis of imperforate transverse vaginal septum was made with hematometra for which drainage was done in March 2021 followed by another drainage in June 2021for hematocolpos followed by Foley's insertion. Foley's was removed after 7 days and was advised to vaginal dilatation, but dilatation was not done regularly. Scan done in August 2021 showed echogenic fluid of around 146cc in lower part of uterus, cervix and upper vagina. Bilateral ovaries and adnexa were normal.

General examination was normal. Her breasts were Tanner stage 3, external genitalia was normal. Rectal examination shows tender, firm, smooth mass. Patient was admitted and was planned for z plasty with skin grafting.

Picture 1: Pelvic ultrasonography showing hematocolpos.



Intra-operative:

Under general anesthesia, in dorsal lithotomy position, the transverse vaginal septum was excised in toto. The total thickness of the septum was around 6-7cm.The septum was present in the middle 1/3rd of vagina. Both upper and lower layer of the septum dissected and 200ml of blood was drained. The raw area after the excised septum was covered with a split skin graft which was taken from medial aspect of left thigh and placed in the defect. Stay sutures were taken. No8 metal vaginal dilator kept which was changed to No6 dilator on post operative day 3. Daily change of dressing was done. On postoperative day 7, patient was taken up for examination under anaesthesia. The graft uptake was good. The wound was cleaned and a plastic syringe which was used in place of a vaginal mould was placed. On postoperative day 13, syringe was removed and dilator kept insitu.

Patient and her mother were taught about local hygiene and need for change in vaginal dilators to prevent reocclusion. For 3 months, patient had vaginal dilator kept insitu all day which was cleaned on a daily basis and after that she was advised to keep the dilators insitu only at night. After 3 months, local examination revealed the graft uptake was complete and healthy and available length of vagina was 8cm. Patient comes in for regular follow up and is having regular menstrual cycles.

III. Discussion

Our case was a complete transverse vaginal septum. It is not a common mullerian anomaly. Transverse vaginal septum can be complete or incomplete. Complete septum is diagnosed earlier as they present with pain abdomen, hematocolpos and primary amenorrhea. Incomplete can be diagnosed much later even during labour. Transverse septum can occur anywhere in the vagina but most commonly in the lower 1/3 of vagina which is around 72%. The septum is made of 2 layers and in between it contains fibroareolar tissue. Detailed history should include presence of genetic abnormalities, presence of secondary sexual characteristics and development of external genitalia. Diagnosis can be made with the help of pelvic ultrasonography, but it can be difficult in cases of incomplete septum. Investigation of choice for mullerian anomaly is usually Magnetic Resonance Imaging[3]. It is used to assess the position and thickness of the septum. Differential diagnoses include imperforate hymen, cervical dysgenesis and vaginal agenesis. The need to differentiate between transverse vaginal septum and imperforate hymen because strict follow up is needed in transverse vaginal septum as the chances of reocclusion is high. Treatment is surgical in which complete resection of septum is done. The routes can be laparotomy abdomino-perineal vaginoplasty, simple vaginal resection or laparoscopic resection of vaginal wall.

Different surgeries have been proposed for the treatment of transverse vaginal septum.

Grunberger[4] method in which cross shaped incision made in caudal part and transverse closure is done.

Another method is where circumferential excision of septum is done and vaginal edges were sutured around the entire circumference to avoid stenosis.

Another approach is the usage of Olbert balloon catheter which causes distension of proximal vagina.

Sardesai[5] et al described Z plasty for vaginal wall management as the best technique compared to the other surgical methods. Cruciate incision is made on the lower septum and triangular flaps dissected. Then the visible areolar tissue dissected and upper layer of septum is cut by cruciate incision. Triangular flaps of the upper and lower septum sutured in zigzag fashion. The raw area is covered with the graft. Graft is taken from the medial thigh or the buttock region. In cases of lower 1/3rd vaginal septum labial fold can be used as a graft.

Complications include cystotomy, vaginal stenosis, dyspareunia, menstrual irregularities, fertility problems, endometriosis and recurrence of symptoms. To prevent recurrence and reduce scarring, postoperative vaginal dilatation helps, especially in young women who are not sexually active. Joki- Erkikila and Heinonen[6] reported 2 out of 3 patients needed reexcision of stricture due to irregular use and apprehension regarding vaginal dilators.

Patients and parents need to be counselled in detail about complications and the need for regular follow up to preserve future fertility and avoid endometriosis.

IV. Conclusion

Transverse vaginal septum is one of the rare mullerian anomaly that can be associated with other anomalies like renal agenesis, imperforate anus and such. Gynecologists should be on the lookout for differential diagnosis when young pre-menstrual girls who come with primary amenorrhea and lower abdominal[1] pain. Correct diagnosis and management can strongly impact on future sexual activity and fertility. It should be made clear to the patients about strict follow up as transverse vaginal septum have high chance of restenosis.

References

[1]. Jain N, Gupta A, Kumar R, Minj A. Complete imperforate tranverse vaginal septum with septate uterus: A rare anomaly. J Hum Reprod Sci. 2013;6(1):74-7

[2]. Opoku BK, Djokoto R, Owusu-Bempah A, Amo-Antwi K. Huge abdominal mass secondary to transverse vaginal septum and cervical dysgenesis. Ghana Med J. 2011;45:174–6

[3]. Ribeiro1 SC, Yamakami LY, Tormena RA, Pinheiro Wda S, Almeida JA, Baracat EC. Septate uterus with cervical duplication and longitudinal vaginal septum. Rev Assoc Med Bras. 2010;56:254–6

[4]. Blanton E.N., Rouse D.J. Trial of labor in women with transverse vaginal septa. Obstet. Gynecol. 2003;101(5 Pt 2):1110–1112.

[5]. Sardesai SP, Dabade R, Chitale V. Double Cross Plasty for Management of Transverse Vaginal Septum: A 20-Year Retrospective Review of Our Experience. *J Obstet Gynaecol India*. 2015;65(3):181-185. doi:10.1007/s13224-014-0542-3

[6]. M. M. Joki-Erkkilä and P. K. Heinonen, "Presenting and long-term clinical implications and fecundity in females with obstructing vaginal malformations," Journal of Pediatric and Adolescent Gynecology, vol. 16, no. 5, pp. 307–312, 2003.

DR.ABINAYA.R, et. al. "Complete Transverse Vaginal Septum- Rare Anomaly." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 21(02), 2022, pp. 01-03.