

**INTRODUCTION:** Transverse vaginal septa are a rare type of mullerian anomaly that result from failed fusion or canalization of the vaginal plate and the caudal end of the mullerian ducts, leading to complete or partial blockage of the vaginal canal. The European Society of Human Reproduction and Embryology (ESHRE) and the European Society for Gynaecological Endoscopy (ESGE) include transverse vaginal septa as a subclass (V3) in their classification system for mullerian anomalies. Transverse vaginal septa may be imperforate (61%), presenting with obstructed menstruation; or perforate (39%) presenting with infertility and dyspareunia. Septa were classified as low if less than 3 cm, mid position if between 3 and 6 cm, and high if greater than 6 cm from the introitus.

**OBJECTIVES:** To describe the clinical features and management of transverse vaginal septum

### CASE REPORT:

We report a case of a 26 year old female married for 3 years who came to the Out patient department with history of intense dyspareunia. Her baseline blood investigations were normal. On per speculum examination, vagina was completely obstructed 2.5 cm from the hymen with a perforator in the septa.

**Investigations:** USG showed an arcuate uterus with proximal vaginal thickness of 5.5mm, suggesting septa. Magnetic Resonance Imaging (MRI) revealed a linear T2 hypointense transverse band in the lower 1/3rd vaginal junction at a distance of 6.4cm from posterior vaginal fornix and 3.5 cm from the introitus.

She was planned for examination under anesthesia and preoperatively, vaginal length was noted- 2.5cm. Intraoperatively, a thick transverse vaginal septum was noted with a perforation.

**Procedure done:** A transverse incision was taken at the level of the perforation, followed by serial dilation and the obstructed blood (5ml) was evacuated. The incision was further extended until the cervix was visualised and the residual septum was resected creating flaps anteriorly and posteriorly. Next, the anterior flap was sutured to the distal end of the proximal vagina with continuous interlocking sutures.

Similarly, posterior flap was sutured to the proximal end of the distal vaginal mucosa. Postoperatively, the vaginal length was noted to be 8cm. A hollow vaginal mold was recommended to be used to prevent post operative scarring and stenosis at the surgical area.



Fig 1. Transverse vaginal septum with micro perforation

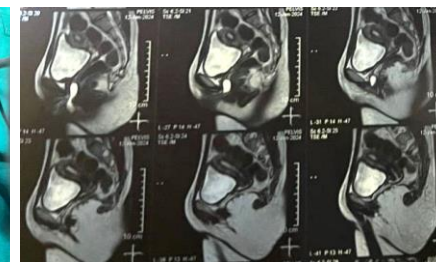


Fig 2. MRI showing hypointense band in the mid-lower 1/3rd vaginal junction



Fig 3. Anastomoses of proximal and distal vaginal mucosa to anterior and posterior flap respectively

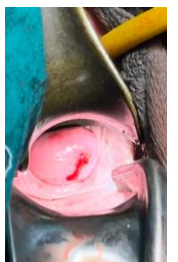


Fig 4. Visualisation of the cervix after resection of the septum

**DISCUSSION:** Transverse vaginal septum results from failure of fusion of the paramesonephric ducts with urogenital sinus. Transverse vaginal septa have a variety of characteristics including position in the vagina, thickness, and presence of perforations. Septa were classified as low if less than 3 cm, mid position if between 3 and 6 cm, and high if greater than 6 cm from the introitus. MRI is highly specific and sensitive for identifying mullerian tract anomalies, while also provide information on associated genitourinary abnormalities. The location and especially the thickness of septum are important characteristics in terms of surgical planning. In general, low and thin septa are less complicated, easier to resect, and require less postoperative care. Treatment of a thin septum is typically straightforward and requires resection of the septum followed by end-to-end anastomosis of the upper and lower vaginal mucosa.

**CONCLUSION:** Transverse vaginal septum is a rare Mullerian anomaly. Patients with perforated low transverse vaginal septum can be asymptomatic until adolescence or become sexually active and may only present with infertility or intense dyspareunia. Therefore, an accurate assessment of the characteristics of the septum, including its location, thickness and presence of perforator is crucial for selecting appropriate treatment. MRI is the gold standard for diagnosing Mullerian anomalies.

### REFERENCES:

1. Samantha M. Pfeifer- Congenital Mullerian anomalies, diagnosis and management.
2. Jain N, Gupta A, Kumar R, Minj A. Complete imperforate transverse vaginal septum with septate uterus: a rare anomaly. J Hum Reprod Sci.
3. Williams CE, Nakhal RS, Hall-Craggs MA, Wood D, Cutner A, Pattison SH, Creighton SM. Transverse vaginal septae: management and long term outcomes. BJOG.

### CONFLICT OF INTEREST:

The authors have nothing to disclose