Vaginal reconstruction with Interdigitating Y-flaps in women with Transverse Vaginal Septa.

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INTRODUCTION: Transverse vaginal septa are rare congenital disorders of sex development, whose surgical management involves varying degrees of vaginal reconstruction. [1] While thicker septa require complex reconstruction with local flaps, muscle flaps, or bowel transposition, thin septa have traditionally been managed by simple excision of the septal tissue and anastomosis of the vaginal ends. This not only shortens the vagina, it also produces a circular scar, which significantly increases the risk of postoperative vaginal stenosis. This paper proposes a simple technique for the reconstruction of thin septa, utilising two interdigitating Y-flaps. The authors also present their 7-year experience of utilising this technique. Custom made illustrations and serial intraoperative photographs will accompany the podium presentation in order to facilitate better understanding of the technique.

THE TECHNIQUE: The transverse vaginal septum comprises an external and internal fibrous lamella, with interstitial areolar tissue interposed between the two. An inverted Y incision is made on the external lamella and the three resulting flaps are raised onto the interstitial tissue all the way to the lateral vaginal wall. A second Y incision is then made on the internal lamella, at 180 degrees to the previous incision; this produces three internal flaps. Finally, the internal flaps are everted and interdigitated with the external flaps which are inverted, producing a zigzag scar.

RESULTS: The authors run a national service for disorders of sex development comprising plastic surgeons and gynaecologists. In the last seven years, eight patients with this rare condition have been identified, with mean age 18.5 years (±4.3y). All patients had the procedure described above. No major complications were reported. Mean follow up was 5.7 months (3-14 months). There were no cases of postoperative vaginal stenosis. One of the

patients carried a twin pregnancy to term and had spontaneous vaginal delivery without problems.

CONCLUSION: The authors present a simple technique for vaginal reconstruction in patients with transverse vaginal septa, based on two interdigitating Y flaps from each septal lamella. This technique obviates the previous need for septal tissue excision, thus maintaining the vaginal length; it also produces a zigzag rather than a circular scar, which reduces the risk of postoperative vaginal stenosis. The authors' 7-year experience with this technique has shown that it is safe and yields very good postoperative outcomes.

REFERENCES:

1. Williams, C. E., Nakhal, R. S., Hall-Craggs, M. A., et al. Transverse vaginal septae: management and long-term outcomes. BJOG : an international journal of obstetrics and gynaecology 2014;121:1653-1658.