Modified McIndoe Technique- Novel Modality in Treatment of Vaginal Agenesis in Young Women

KEYWORDS: Vaginal agenesis, Vaginoplasty, McIndoe technique.

ABSTRACT: Incidence of vaginal agenesis varies from 4000 to 5000 live female births. Developmental anomalies of the Mullerian duct system is the major cause. This anomaly is also known as Mullerian aplasia. It can be complete or partial. Complete Mullerian aplasia (MRKH – Mayer Rokitansky Kustner Hauser syndrome) - along with congenital absence of uterus & cervix Partial Mullerian aplasia is less common - presence of uterus & blind vaginal pouch. Tubes & ovaries may be normal (normal endocrine function) in all the cases Creating a neovagina in these cases so as to mimic normal vagina in terms of Size, lining & appearance is a challenge. Though multiple techniques have been designed, Modified McIndoe vaginoplasty represents the simplest one with good results.

REVIEW OF LITERATURE: Congenital vaginal agenesis is a rare malformation that has an incidence of one in 4000 to 5000 female newborns. Although vaginal agenesis is most commonly encountered in women with Rokitansky syndrome (Mayer-Rokitansky-Kuster Hauser syndrome or Mullerian aplasia). It can also present in patients with Turner syndrome, Morris syndrome and as a part of combined congenital defects. Patients with Rokitansky syndrome and AIS have normal secondary sexual characteristics and external genitalia.

INTRODUCTION: Modified McIndoe technique of vaginoplasty is a simple reconstructive surgery for vaginal agenesis. This promotes satisfactory vaginal intercourse & access to (neo) cervix and uterus. Thus it alleviates sexual inability & associated severe psychological problems. Numerous procedures were described for creation of neovagina with acceptable function. They include serial dilatation, Vecchietti’s technique, sigmoid or ileal flaps, Gracilis flap, Singapore flap, expanded vulval flap, dilatation, Vecchietti’s technique, sigmoid or ileal flaps, Gracilis flap, Singapore flap, expanded vulval flap, Davydov technique & so on. In this study, we have evaluated the ease & simplicity of modified McIndoe technique and also the functional & anatomical outcome with least morbidity.

OBJECTIVE: To present the results of Modified McIndoe technique with respect to sexual function, vaginal length and complication rates in patients with vaginal agenesis.

METHODS: This study was conducted in Government General Hospital, Kurnool in Department of Plastic Surgery from January 2014 to September 2014. Cases of Vaginal agenesis underwent surgical correction and neo vagina by McIndoe vaginoplasty. All the cases were young women in the age group of 16 to 20 years.

Clinical Presentation: Symptoms:
- Primary amenorrhoea without cyclical abdominal pain in 12 cases.
- Primary amenorrhoea with cyclical abdominal pain in 2 cases.

Signs:
- Secondary sexual characters; Phenotype – female- in all cases were appropriate for age. Normal thelarache and adrenarche.
- On local examination, external genitalia were normal. Appearance of both introitus and vagina had variations in all cases were appropriate for age.
- Per rectal examination showed...
the mould were removed on 8th postoperative day and Good graft take up was noted in all cases. Labial stitches mould in place. Colour & output of urine was checked.

of the incision that are made in the perineum, forming the space. The free edge of skin graft was sewn to the edges of ovagina helping adaptation of the Split Skin Graft to the expansion of the prepared mould within the space of ne-vagina. The active suction cannula was disconnected and cannula removed. This followed into the space, initially collapsing the foam mould by placing the mould irregularly experienced severe pain during intercourse and had a mean vaginal length of 6 cm (4-8cm).

All husbands ratified their sexual relation as satisfactory.

DISCUSSION:
Modified McIndoe technique is a simple effective procedure to create neovagina for the treatment of vaginal agenesis. It is associated with low morbidity without any major complications as supported by our results. However, use of mould in the postoperative period is a must to keep the vagina durable and functioning, which calls for good patient compliance, as noticed in our patients. Neovagina created by this technique mimics normal vagina both anatomically and functionally as seen in our patients, for good patient compliance, as noticed in our patients. McIndoe vaginoplasty is done in a single sitting. Good results were achieved in a relatively short period. Other techniques need sophisticated equipment with expertise and high motivation by the patient. It takes a long time to show results.

CONCLUSION:
The findings suggest that a modified McIndoe technique is a simple effective procedure for the treatment of vaginal agenesis, however, proper mould use after surgery remains the corner stone of treatment.

FOLEY’S CATHETER AND FLATUS TUBE ARE INSERTED.
LABIAL STITCHES ARE APPLIED
REFERENCE