Vaginal reconstruction by Sheare's technique

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Summary : **We performed vaginal reconstruction in two cases of vaginal agenesis by Sheare's technique and the results were encouraging. In McIndoe's procedure a split thickness graft is required which is a disadvantage as it leaves a large area of scarring at the donor site. Sheare's technique is much easier to perform with least complications and is a safe, effective and better procedure. 90% & 98% grafts were accepted in our cases.**

Introduction

Vaginal agenesis is a very rare condition. Neo-vagina construction has been described by various procedures, Mcindoe's technique (McIndoe et al 1983) of vaginoplasty with full thickness skin graft is one of the popular methods. In search of alternative method of graft amnion was used for a long time (Burger 1939, Dhall 1984). Amnion undergoes some for of metaplasia and covers the lining of the neo-vagina. Here we will describe two cases of vaginoplasty where amnion was used as a graft where we performed vaginoplasty by Sheare's methods (Sheare's 1960).

Case No. 1

Smt K.B., 19 year old , married for 2 years, presented with primary amenorrhoea and infertility. Her secondary sex characters were well developed. External genitalia looked normal but normal vagina was absent, except for a depression of 2 cm depth. External meatus was placed normally. Per rectal examination revealed hypoplastic, small uterus. Laparoscopy revealed small rudimentary uterus with normal tubes and ovaries on both sides. Buccal smear was positive and USG did not reveal any renal tract abnormality. Vaginoplasty by Sheare's method was done on 13.02.97 and the post opearative period was uneventful. Graft was accepted over 90% areas. Patient was discharged on 20th post operative day and an acrylic mould was given to her for regular self dilatation. She was followed up for two months. Vagina now is well formed and its length is 10cm and a Sim's speculum (broader end) could be inserted easily. She was having satisfactory coitus.

Case No. II

Smt G.S., 18 year old, married for 2 years, presented with primary amenorrhoea and unsatisfactory coitus. Her secondary sex characters were well developed but the vagina was atretic with a depression of 2 cms deep only at the vestibule. Per rectally, the uterus was very small. Laparoscopy revealed a very small rudimentary uterus but bothsided tubes and ovaries were normal. Her buccal smear was positive and USG did not reveal any abnormality. The mould was now fixed to the labia majora and kept in situ for 7 days, following which the stitches were removed. Decision of vaginal reconstruction was taken and complete pre-operative investigations were done. Patient was operated on 10.04.97 by Sheare's technique as in case No.1. Post-operative period was uneventful. She was then discharged on 20th post-operative day. She was then followed up for 2 months. Amniotic graft was taken up to 95-98% and the length of neo-vagina was 10.5 cms. She was having satisfactory coitus.

Surgical Technique.

a. Preparation of the mould and graft. We used amniotic membranes for graft, which was freshly collected from the labour room, on the day of the operation and kept in normal saline until it was used over the acrylic mould specially made for this purpose.

b. Formation of neo-vagina; A longitudinal incision was made at the rim of the vestibule. The mucous membrane of the vestibule was dissected medially towards the midline. The same procedure was performed on the other side. The mucous membranes of the vestibule is now pulled forward and a dimple was noted, one on each side. These are the spots where the Mullerian ducts were supposed to open. These

dimples are now gradually dilated by Hegar's dilators from no.4 to no.25 and the dilators go in with remarkable ease. At this point the surgeon will notice two blind barrel shaped canals separated by a thin margin of the vestibular mucuous membrane which was now divided anteriorily and fixed to the perineum. A stretchable 12-14 cm deep vagina is thus formed which is kept open by an acrylic mould covered with amniotic membrane. The mould is now fixed to the labia majora and kept in situ for 7 days, following which the stitches are removed. The mould is cleaned and reinserted several times a day. The operation is remarkably bloodless and hardly takes30 minutes. The success of this operation is due to the fact that embryological Mullerian duct opening is dilated. But in absence of regular daily coitus for first six weeks the neovagina amy contract.

Conclusion

Vaginal reconstruction by Sheare's technique with amniotic graft is very simple, safe and effective technique. There were minimal complications, morbidity and discomfort with a satisfactory success rate.

References

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