43. HUMAN AMNION FOR VAGINAL RECONSTRUCTION SURGERY

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Vaginal agenesis is a devastating abnormality affecting psychosexual development and women's ability to perform successful sexual relationships. Vaginal reconstructing surgery can provide much needed relief to these patients. Here we are presenting two cases of successful vaginal reconstruction surgeries, one with a functioning uterus and another one with an absent uterus.

CASE 1

A 14 year old girl who had primary amenorrhea and cyclical lower abdominal pain was diagnosed of having agenesis of lower 2/3 of vagina and she had undergone an unsuccessful vaginal surgery in another tertiary care setting and it only provided her a temporary relief. Since she had recurrence of her symptoms she presented to us and ultrasound scan revealed haematocolpus in the upper vagina and haematometron. Therefore she was offered vaginal reconstruction surgery.

A transverse incision was made over the vaginal dimple. A space was created by blunt and fine dissection between the urethra and the anal canal and it was extended to connect the upper 1/3 of vagina. A mold wrap with human amnion was inserted to the space and it was anchored to the labia and also, the both labia were approximated to prevent displacement of the mold. The mold was kept in place for 2 weeks under antibiotic cover. After 2 weeks the mold was removed and it created a vagina with adequate dimensions. She was followed up with regular supervised vaginal dilation for about 3 months and now she is totally symptoms free and has normal menstruation.

CASE 2

27 year old married woman was diagnosed of having Mayer-Rockitansky-Kuster-Hauser syndrome with absent uterus and vagina. Due to the fact that her main concern was unable to have sexual intercourse, a vaginal reconstruction surgery was performed.

Similar to the first case a transverse incision was made over the vaginal dimple and a pouch was created between urethra and the rectum by carefully dissecting the space in between them. The pouch was extended up to the under surface of the pelvic peritoneum under laparoscopic view to get the maximum vaginal length. A vaginal mold covered with human amnion was inserted to the pouch as described in the first case.

One week later the mold was removed and reinserted after wrapping with a new amnion. A satisfactory vaginal pouch with adequate dimensions was created and she was followed up for about 3 months with supervised vaginal dilation and now she leads a satisfactory sexual life.

DISCUSSION

Although different types of vaginal reconstruction methods are described, not all patients with congenital absent vagina require surgery. If it is decided that the treatment should be carried out by creating a space between urethra, bladder and rectum, human amnion appear to have greater advantages over the split skin graft to line the cavity. The amnion is readily available and there are no problems of painful donor sites which is a disadvantage of the McIndoe Reed procedure. There is no problem with immune rejection since amnion does not express histocompatibility antigens. The mechanism by which accelerated epithelialization occurs with amnion is uncertain and some demonstrated microscopic evidence of new blood vessel formation and proposed that an angiogenic factor is produced by the amnion. The most important factor for the successful outcome with these patients is regular follow up with supervised vaginal dilatation to prevent formation of contractures.