

VAGINAL REPLACEMENT - LESSONS LEARNED FROM 158 CASES

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Introduction: Females with anorectal malformations frequently suffer from genital anomalies. The vaginal repair ideally is done using the patient's vaginal tissue. When there is insufficient or absent vagina, a vaginal replacement must be performed. The authors' experience includes replacement with rectum, colon and small bowel. The decision to use specific part of bowel depends on the anatomy and the functional status of the patient.

Methods: 158 medical records of patients who underwent vaginal replacement were retrospective reviewed with emphasis on the factors which determine the decision to use a specific type of tissue, and post-operative complications. IRB #16-2323.

Results: 132 patients had a cloaca, 22 patients had a recto-vestibular fistula with absent vagina, and 4 patients had cloacal exstrophy. 84 patients had a partial vaginal replacement. The replacement tissue was rectum (69), small bowel (46), and colon (43). Major complications happened in 9 patients: acquired atresia of the neo-vagina (5), urethro-vaginal fistula (3), and recto-vaginal fistula (1). Neo-vagina acquired atresia happened in 18.8% of the small bowel group, 7.1% of the colon and 5.6% in who rectal was used. Small bowel was performed early in the series. Rectal tissue was selected in cases with poor prognosis for bowel control or when the rectum was dilated enough to allow for a longitudinal division of it. In patients with good prognosis for bowel control, colon was the selected choice. Minor complications happened in 32 patients: neo-vaginal mucosal prolapse (15), stricture at the neo-vagina introitus (13), and stricture at the anastomosis between native vagina and neo-vagina (4).

Conclusion: Vaginal replacement with rectum is highly desirable in patients with poor functional prognosis. In patients with good prognosis for bowel control, the rectum must be preserved. Descending colon can be used as a second option. Small bowel replacement represents the less desirable option probably due to its delicate blood supply.