

GENITOURINARY MOBILIZATION WITH VESICOVAGINAL FISTULA REPAIR

Synopsis of Video

In this video presentation, combined repair of urethral and genital defect is demonstrated together with repair of congenital vesicovaginal fistula, in a rare entity of urogenital sinus.

Hypothesis / aims of study

Urogenital sinus is a rare anomaly¹. Sometimes, is associated with cloacal anomaly or high imperforate anus. In rare instances, it is associated with urogenital fistula².

This video presents stepwise demonstration of reconstruction of a complex pathology affecting the urinary and genital tracts

Study design, materials and methods

7- year old female with history of repair of high imperforate anus, presented with uro-genital sinus and vesicovaginal fistula. Cystogram demonstrates fistulous communication between the bladder and vagina. MRI confirmed the presence of fistula. Cystoscopy was performed via suprapubic tract. A blind ending bladder neck was viewed and bladder capacity was accepted. Via a Pfannensteil incision with complete mobilization of the bladder was the first step. Next, bladder neck was completely mobilized. After the bladder was completely bivalved, the fistulous tract could be reached.

A half circle dilator was put in the bladder neck. Incision is made at the proposed site of the external meatus and after complete excision of the fibrosed segment; the dilator could easily pass to the perineum

Excision of the perineal skin and atretic lower end of the vagina recovered the continuity of the genital tract. Further dissection of vaginal and perineal tissues followed, on order to have an interoitus of normal caliber. Posterior perineal flap vaginoplasty was carried out. Exteriorization of external urethral and vaginal openings is then achieved, using 4/0 PDS.

Fistulous opening in the vaginal wall was closed, followed by closure of the bladder wall in layers. Closure of the wound followed, leaving suprapubic tube, urethral catheter and 2 ureteric stents.

Results

Six months after surgery, the child enjoyed patent urethra and vagina. She is maintained on CIC with complete dryness in between cath. Vaginal lumen is proportional to her age.

Concluding message

One stage reconstruction of urogenital sinus is feasible and successful. Awareness of different surgical techniques that could be used simultaneously, efficient anaesthetic performance and meticulous follow up are mandatory prior to embarking on one stage repair.

References

¹ Jenak, R., Ludwikowski, B., Gonzalez, R.: Total urogenital sinus mobilization: a modified perineal approach for feminizing genitoplasty and urogenital sinus repair. J. Urol. 165:2347-9, 2001.

² Creatsas, G., Deligeoroglou, E., Sakellariou, P., Kyritsis, N. and Michalas S.: Reconstruction of urethrovaginal fistula and vaginal atresia in an adolescent girl after an abdominoperineal-vaginal pull-through procedure. Fertil Steril. 68:556-559, 1997.

<i>Specify source of funding or grant</i>	Institutional
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require eithics committee approval because</i>	Yes
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes