Ventral onlay graft urethroplasty
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Bulbar urethra
Ventral onlay graft urethroplasty

Surgical technique: step by step
Preparation of the patient

Simple lithotomy position
Preparation of the patient

Allen stirrups with sequential inflatable compression sleeves
Two surgical teams work simultaneously

- harvesting the oral mucosa
- preparing the bulbar urethra
Two sets of surgical instruments

Oral mucosa

Urethroplasty
Advantages of the double team

- decrease of surgical time to ~ one hour
- decrease of contamination in surgery
The patient is intubated through the nose, allowing the mouth to be completely free.
Appropriate mouth retractor

Only one assistant is needed to harvest the oral graft
Stenon’s duct

the harvesting site is underlined
The oral mucosa is removed
The graft is 4 cm long and 2.5 cm wide
The harvesting site is closed
Methylene blue is injected into the urethra.
The distal extent of the stenosis is identified by inserting a 16 Ch catheter with a soft round tip.
Midline perineal incision
The urethra is freed from the bulbocavernous muscle
The distal extent of the stenosis is identified and underlined.
The incision on the ventral urethral surface is underlined.
The ventral urethral surface is fully opened.
The oral mucosal graft is sutured to the left margin of the urethral mucosa.
A Foley 16 Ch grooved silicone catheter is inserted
The oral mucosal graft is moved to cover the urethral plate and sutured to the right margin of the urethral mucosa.
The corpus spongiosum is closed over the oral mucosal graft.
The perineal wound is closed
Post-operative care

- Patient is discharged from the hospital three days after surgery
- Patient is maintained on oral antibiotics until the catheter is removed
- Three weeks following surgery, the catheter is removed and voiding cysto-urethrography is obtained
Post-operative complications

- Urethrorrhagia due to nocturnal erection
- Temporary numbness or dysesthesia to the perineum
- Scrotal swelling
- Urethral fistula