

The Modified Sliding Technique (MoST) for Penile Lengthening with penile prosthesis insertion #198

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Introduction

- Penile curvature caused by Peyronie's disease (PD) and the subsequent difficulty with penetration and shortened stretched penile length (SPL) are extremely distressing to men.
- While standard incision and plication or modeling may work for small abnormalities, grafts are the preferred method for correcting large deviations or multiple abnormalities. Both techniques often shorten the SPL.
- Mobilization of the neurovascular bundle (NVB) has been described to maintain length during PD treatment, but this is often only temporary. Following inflatable penile prosthesis placement (IPP), NVB can be mobilized and PD treated as the IPP acts as a scaffold for penile reconstruction.
- We describe our experience in correcting PD and lengthening following NVB mobilization followed by IPP placement, using a subcoronal incision.

Aim

To describe a technique for subcoronal incision and IPP placement that allows access to the entire corporal shaft for correction of penile angulation, incision of plaques in Peyronie's disease and other penile reconstructive procedures.

Methods

- 25 men presented with PD and ED refractory to medical management.
- All patients had dorsal and midline plaque(s) identified by Doppler US.
- NVB release, corporal incision, IPP placement followed by correction of angulation and penile modeling, was performed using our modified no touch technique.
 - A subcoronal incision is made, the penis degloved to the penoscrotal junction and the NVB is mobilized using a modified "sliding technique" (Rolle, et al. J Sex Med 2012).
 - Using electrocautery, corpora incisions are created and an IPP is placed.
 - Using relaxing incisions with cautery into the corpora, penile modeling, or plicating stitches, the residual curvature was addressed.
- No grafting material was used in any patients.

1. A circumferential subcoronal incision is made (1.5 cm proximal to the glans).
2. Penis is degloved and Dartos is sutured to the drape
3. The reservoir is placed through the inguinal ring into the retropubic space with the aid of a retractor
4. The borders of the urethra are marked
5. Bucks fascia and the neurovascular bundle within it is released bilaterally creating "wings"
6. The corporal incision is marked, incisions are made and we stretch the phallus prior to placing the prosthesis
7. Penile prosthesis is placed, and the neurovascular bundle is closed over the defect; no graft is used to fill the defect
8. Pump is placed into a dependent/posterior position in the scrotum. Tubing is hidden behind the spermatic cord
9. Bucks is closed in quadrants and we run penile skin
10. Note the decreased edema in the scrotum. No tubing is seen on the ventral penis
11. Mummy wrap is applied and penile prosthesis is left 70% inflated left for 72 hrs
12. Image at the 3 month post-operative appointment; note no visible subcutaneous tubing

Results

Patient Age (years)	62 (58-81)	
History of Radical Prostatectomy (%)	48%	
History of Vascular Disease	64%	
History Diabetes	76%	
Length of ED (years)	4.2 (1.8-12.2)	
Total Operative Time (min)	175 (90-228)	
	Preoperative	Postoperative
Stretched Penile Length (cm)	6.8cm (6.1-8.8)	9.8cm (7.6-11.5)
Penile Angulation (degrees)	44° (22-68)	5° (3-7)
Ability of have sexual intercourse (%)	16%	100%

- All patients were safely discharged on postoperative day zero.
- We had 2 complications: partial necrosis of the glans and a scrotal hematoma.
 - None of the complications were infectious.
 - All patients are doing well.
- After a minimum of 6 month follow-up, all men returned to sexual activity.
- All patients were fully satisfied.

Conclusion

In patients with ED and PD the subcoronal approach to inflatable penile prosthesis allows for simultaneous corpora elongation and correction of penile angulation due to any PD through the same incision. Curvature improved by over 95% and SPL increased on an average by 3.0cm.