

Penile Replantation : Lessons Learnt From Failure

Dr.Dipankar Sharma, Resident, Department of Urology
Dr.Debmalya Gangopadhyay, Consultant, Department of Urology

32 year old gentleman, alleged history of assault by his fiancé at around 12:30 am with a heavy knife, completely cutting off his penis near the base. Patient along with the chopped penis was brought to the hospital at around 3:30 am.

Underwent Microvascular anastomosis of 2 arteries and 1 vein. Vascularity confirmed by Doppler on POD5, planned discharge on POD7.

Started on Inj. Clexane 40 IU OD post operatively, with daily dressing of wound, IV antibiotics

Wound C/s: Pseudomonas aeruginosa

POD 15: Revision amputation & Perineal urethrostomy done



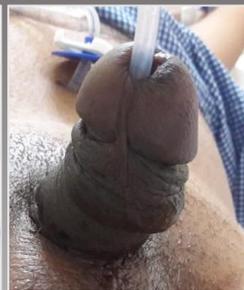
Penile stump and the amputated penis in ice



Microvascular Anastomosis of 2 arteries and 1 vein



Well vascularized penis with decreasing edema on POD 2 and POD 4



Superficial skin necrosis on POD7
-> debridement done



Ventral urethral fistula and wound necrosis on POD 9



Mummified Penis POD 14

Discussion:

- Storage of the amputated organ in direct contact with ice to be avoided
- Complete amputation, superficial dorsal artery anastomosis and more no. of nerves co-apted are favorable, while increasing no. of vessels anastomosed is unfavorable¹
- No. of vessels or the specific vessels requiring anastomosis is still unclear
- Suprapubic cystostomy is not always necessary
- Leech therapy or Vein blood-letting to decrease penile edema post-operatively
- Post-op strong anticoagulation is recommended
- Daily dressing of wound
- Use of oral Sildenafil early after replantation²
- Use of penile splints advocated in some studies
- Per urethral catheter for 4 weeks

References:

- 1.Morrison et al. Penile Replantation: A Retrospective Analysis of Outcomes and Complications. J Reconstr Microsurg 2017 May;33(4): 227-232
2. Shibo FU et al. Successful Penile Replantation and the Role of Post replantation Sildenafil Therapy: Report of 2 Cases and Literature Review. Sex Med. 2019 Sep;7(3):352-356