

Bipedicled ventral penile island flap for correction of long bulbous urethral strictures

Introduction

Bulbar urethral strictures which require urethroplasty that are too long for circumferential excision and end to end anastomosis are best treated by a substitution urethroplasty technique in which stricturotomy is done and a patch of suitable material either flaps or grafts are anastomosed to restore the caliber of the urethra to normal.

Design

To evaluate the efficacy of bipedicled ventral island skin flap for the management of long bulbous urethral strictures. From Jan 2003 to June 2006, 96 patients with long bulbous urethral strictures have been managed by bipedicled ventral island flap. 60 patients of them had the flap installed on the floor of the urethra. 24 on the roof and 12 cases needed a full tube replacement of the stricture segment. All patients were subjected to radiological evaluation including retrograde and voiding cystourethrogram, sonourethrography and full lab evaluation. Postoperative follow-up included retrograde and a voiding cystourethrogram and subjective improvement of the patient. Late follow up was done 5 years after surgery in most cases.

Results

Urethral silicone catheters were removed 2-3 weeks post operatively after doing peri catheter urethrogram revealing no anastomotic leakage. Two patients developed urethra-cutaneous fistula which have been managed by surgical excision. Three patients developed proximal anastomotic strictures late in the follow up, two of them were managed endoscopically and the third one needed a buccal mucosal patch graft.

Conclusion

Bipedicled ventral penile island skin flap is a well vascularized flap which permits wide mobility; it can be transferred freely to the proximal bulbomembranous urethra. It adapts well to a wet milieu, no hair providing a good substitute for the complex long bulbous strictures.

Specify source of funding or grant	no funding
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Ain Shamas University Ethical Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes