



## A CASE OF COMPLICATED HAIRY RECURRENT STRICTURE URETHRA.

<b>Dr. Chaitanya Gaikwad</b>	Junior Resident III, General Surgery, Department Of General Surgery, Bharati Vidyapith Medical College & Hospital, Pune, 411043.
<b>Dr. Abid Raval*</b>	Senior resident, Urology, Department of Urology, Bharati Vidyapith Medical College & Hospital, Pune, 411043. *Corresponding Author
<b>Dr. Kshitij Raghuvanshi</b>	Senior resident, Urology, Department of Urology, Bharati Vidyapith Medical College & Hospital, Pune, 411043.
<b>Dr D.K.Jain</b>	HOD & Prof Urology, Bharati Vidyapith Medical College & Hospital, Pune, 411043.

## KEYWORDS :

## INTRODUCTION:

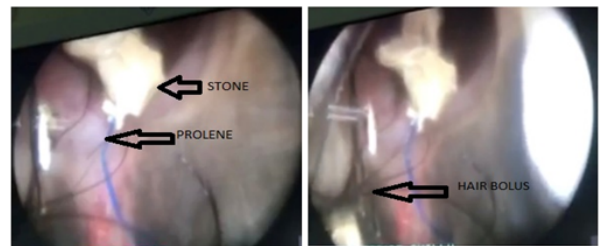
- The surgical correction of stricture urethra is a challenging issue in Urology. Well-known complications include infection, stricture recurrence, incontinence, retention, erectile dysfunction, fistulas, urgency, hematoma, urethral hair growth and hairball formation (when skin graft used). We describe a technique of chemical depilation using the urethral instillation of depilatory cream.
- We present a case of stricture urethra with hair growth in the urethra along with calculus formation due to scrotal skin flap used for urethroplasty.

## CASE HISTORY:

- A 62 year old male patient presented to our institute with chief complaints of poor stream, increased frequency of micturation, sense of incomplete evacuation of urinary bladder along with lower abdominal pain and burning micturation. History of trauma for which he underwent scrotal skin flap urethroplasty in 1984, for stricture in bulbar urethra which he developed following road traffic accident. During the entire period until recently when the patient came for definitive treatment he had recurrent episodes of urinary tract infection, fever, poor stream of urine for which he took conservative line of treatment but was never relieved from the symptoms.

## MATERIAL &amp; METHODS:

- On Examining the urethral meatus was adequate. Vertical midline scar in perineum and right scrotal scar was present. Urethral caliberation was done and showed the obstruction in mid bulbar urethra. Hence RGU (Retrograde urethrogram) was done which showed urethral calculus and no contrast going beyond bulbar urethra, USG showed prostate size 45cc, prevoid volume 350cc, postvoid volume 180cc, uroflowmetry showed obstructed pattern of flow, suggestive of stricture urethra.
- Hence the patient underwent cystoscopy which showed urethral calculus in bulbar urethra developed over a non absorbable prolene suture of previous surgery and evidence of substitutional urethroplasty along with tuft of hair arising from the scrotal skin which was used, and there was a tight stricture in Proximal Bulbar urethra.
- He underwent cystolithotripsy to fragment and remove the stone from the urethra along with removal of the prolene suture using laser and optical internal urethrotomy was done by incising the stricture in proximal bulbar urethra. Cystoscopy showed significant hair growth which underwent chemical depilation by urethral instillation of depilatory cream. A proprietary cream was used, containing calcium thioglycollic acid as the active ingredient. post operative recovery was uneventful.



**Fig. 1. Urethroscopy shows presence Of prolene suture with stone** **Fig. 2. Urethroscopy also shows presence of ingrowing hairs in the urethra**

## DISCUSSION:

- Urethroplasty is the main treatment for long segment anterior & posterior urethral stricture. Because of its good vascularity & mobility, a scrotal flap is very effective. Patients in India are chronic chewers of tobacco or betel nut causing oral leukoplakia (pre-malignant condition) & oral submucous fibrosis, making it difficult to harvest the buccal mucosa. Problem of using midline scrotal flap is its tendency for hair growth, which results in recurrent UTI, hair growth & calculus formation [1].
- In order to avoid hair growth in the neourethra, several prevention strategies have been followed [2-4]. However, they often fail and treatment of the hair-bearing urethra is required. Different options for this treatment include CO2 laser desiccation, YAG laser photocoagulation, grasper extraction, diode laser, electrolysis, and hair tricholysis with thioglycolate or open surgery revision [5-8].
- Cystoscopy showing significant hair growth hence chemical depilation by urethral instillation of depilatory cream is an option. A proprietary cream was used, containing Calcium thioglycollic acid as the active ingredient. Calcium thioglycolate acts on the keratin of the hair, breaking the disulphide bonds, causing the hair fibre to swell, become weak and finally break off at its base, leaving the hair follicle [9,10].
- The cream (5 mL mixed with 5 mL viscous lignocaine, 2%) was instilled urethrally through a 10 mL syringe. The external urethral meatus was then held clamped with the fingers for 10 - 15 min and the urethra gently massaged, allowing the cream to spread along the entire surface of the urethra. All the depilated hair was then subsequently passed during voiding. Patient then underwent cystoscopy to assess the success of depilation after 1 week of follow up. The patient was taught how to instil the cream, and did so once a month for 4 months. at present advised to follow up once in 6 months for a check cystoscopy.

## CONCLUSION:

- Use of full thickness skin graft and non absorbable sutures could lead to future complications of hair growth in urethra, recurrent urinary tract infection and calculi formation, hence it is avoided, better available methods of substitution urethroplasty by

buccal mucosa graft should be practised to avoid the complication of hair growth and stone formation. Hair depilation was effective and was confirmed by cystoscopy after instillation. Cystoscopy on follow up later showed no hair re-growth in the following 4 months. The urethra, flap and bladder showed no inflammation on follow up cystoscopy. This procedure requires patients compliance and regular follow ups.

#### REFERENCES:

- [1] H. S. Rogers, T. A. McNicholas, and J. P. Blandy, "Longterm results of one-stage scrotal patch urethroplasty," *British Journal of Urology*, vol. 69, no. 6, pp. 621–628, 1992
- [2] L. H. Finkelstein and L. M. Blatstein, "Epilation of hair-bearing urethral grafts using the neodymium:YAG surgical laser," *Journal of Urology*, vol. 146, no. 3, pp. 840–842, 1991.
- [3] H. A. Bagshaw, J. T. Flynn, and A. N. James, "The use of thioglycolic acid in hair-bearing skin inlay urethroplasty," *British Journal of Urology*, vol. 52, no. 6, pp. 546–548, 1980.
- [4] A. Gil-Vernet, O. Arango, J. Gil-Vernet Jr., A. Gelabert-Mas, J. Gil-Vernet, and L. M. Zinman, "Scrotal flap epilation in urethroplasty: concepts and technique," *Journal of Urology*, vol. 154, no. 5, pp. 1723–1726, 1995.
- [5] S. Cohen, P. M. Livne, D. Ad-El, and M. Lapidot, "CO<sub>2</sub> laser desiccation of urethral hair post-penoscrotal hypospadias repair," *Journal of Cosmetic and Laser Therapy*, vol. 9, no. 4, pp. 241–243, 2007.
- [6] Hemal and A. K. Singh, "Recurrent urethral hairball and stone in a hypospadiac: management and prevention," *Journal of Endourology*, vol. 15, no. 6, pp. 645–647, 2001.
- [7] D. S. Crain, O. F. Miller, L. J. Smith, J. L. Roberts, and E. V. Ross, "Transcutaneous laser hair ablation for management of intraurethral hair: initial experience," *Journal of Urology*, vol. 170, no. 5, pp. 1948–1949, 2003.
- [8] J. P. Crew, V. Nargund, and G. J. Fellows, "Symptomatic urethral hair ball and diverticulum complicating island flap urethroplasty," *Scandinavian Journal of Urology and Nephrology*, vol. 30, no. 3, pp. 231–233, 1996.
- [9] Bagshaw HA, Flynn JT, James AN, Johnston SR, Blandy JP. The use of thioglycolic acid in hair-bearing skin inlay urethroplasty. *Br J Urol* 1980; 52: 546–8
- [10] R.A. KUKREJA, R.M. DESAI, R.B. SABNIS, S.H. PATEL and M.R. DESAI Muljibhai Patel Urological Hospital, Dr Virendra Desai Road, Nadiad, Gujarat, India *BJU International* (2001), 87, 708–709