CASE STUDY UTTAR BASTI – THE PROMISING APPROACH FOR THE MANAGEMENT OF URETHRAL STRICTURE

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Abstract

A Urethral stricture is a narrowing caused by scarring of the lining of the urethra and the surrounding corpus spongiosum. Presenting symptoms of urethral strictures often include decreased urinary stream, incomplete emptying of bladder, dysuria, UTI, and/or a rising post void residual (PVR). Cystoscopy and urethroscopy should be performed in all patients in whom urethral stricture is suspected. Strictures can be treated with dilation or visual urethrotomy. Single-stage open surgical repair by anastomotic urethroplasty, buccal mucosa graft, or penile flap is desirable if the obstruction recurs. Uttar basti is one of the important panchakarma procedure for treatment of reproductive and urinary disorders. In male decoctions and oils are passed per urethra to bladder and per vagina to uterus or urinary bladder in female. Entire procedure should be performed in asceptic condition. A detailed history with proper indication and skills are required to do uttar basti. Therefore from this case study we can accomplish that uttar basti shows significant results in urethral stricture.

Keyword: Urethral stricture, Uttar basti, Urethroscopy, Retrograde urethrography

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1. Introduction

A **Urethral stricture** is a narrowing caused by scarring of the lining of the urethra and the surrounding corpus spongiosum. Strictures can range from less than 1cm long to those that extend the entire length of the urethra. The most common aetiology of **urethral strictures** is idiopathic, followed by iatrogenic causes, including transurethral resection, urethral catheterization, prostate cancer treatments, and previous hypospadias surgery. The **prevalence** in industrial countries is estimated at around 0.9%. Morphologically, the stricture is an alteration of the urethra by scarring. **Presenting symptoms** of urethral strictures often include decreased urinary stream, incomplete emptying of bladder , dysuria, UTI, and/or a rising post void residual (PVR). Other urological conditions, including bladder outlet obstruction from prostatic enlargement, may mimic symptoms of urethral strictures. Congenital urethral stricture is uncommon in infant boys. The fossa navicularis and membranous urethra are the 2 most common sites of urethral stricture. Severe strictures may cause bladder damage and hydro nephrosis with symptoms of obstruction or urinary infection. Typical **options for evaluation** of urethral stricture include urethroscopy, retrograde urethrography (RUG), voiding cystourethrography (VCUG), and ultrasound. Cystoscopy and urethroscopy should be performed in all patients in whom urethral stricture is suspected. **Strictures can be treated** with dilation or visual urethrotomy. Single-stage open **surgical repair** by anastomotic urethroplasty, buccal mucosa graft, or penile flap is desirable if the obstruction recurs. **Complications** include chronic prostatitis, cystitis, chronic urinary infection, diverticula, urethrocutaneous fistulas, periurethral abscesses, and urethral carcinoma. Vesical calculi may develop from chronic urinary stasis and infection. **Uttar basti** is one of the important panchakarma procedure for treatment of reproductive and urinary disorders. In this procedure medicated oil, decoction, ghrita are passed through genito- urinary tract. In male decoctions and oils are passed per urethra to bladder and per vagina to uterus or urinary bladder in female. Entire procedure should be performed in asceptic condition. Recurrence and least encouraging result of urethral dilatation lead to think for procedure, which may prove remedy for Mutrakricchra (difficulty in urination) in the form of Uttarbasti which is described by Acharya Sushruta under of 'Shasti Upakramas' which is unique treatment of Vrana.

Case History
A 30 yrs. old male patient, diagnosed case of urethral stricture visited to Parul Ayurveda hospital Vadodara with complaints of difficulty in urination, decreased the flow of urination, urgency of urination, burning micturition, heaviness on lower abdomen. He could pass urine only with calibration.

Past History
Patient having a history of RTA in 2016 than he was admitted for bilateral CRIF for lower limb at orthopaedic center. After that patient had arisen vesical calculus and cystoscopy removal of calculus was done. Further patient having difficulty in urination after CRIF so he visited the urologist and diagnosed urethral stricture after two months of removal of catheter and urologist recommended cystoscopy with dilatation of urethra twice for the management of stricture. Last cystoscopy with dilatation was done in September 2022 but could not improve significantly. For recurrent problem related to urination he approached for conservative and alternative treatment at Parul Ayurved Hospital.

Chief complaints
- Difficulty in urination,
- Decreased the flow of urination,
- Urgency of urination,
- Burning micturition,
- Heaviness on lower abdomen

Examination of the Patient

Table 1: Atura bala Praman Pariksha (Examination of the Strength of the patient)

1	Prakruti (Constitution of the person)	Vata pradhan Pitta, Rajas
2	Sara (Quality of tissue)	Madhyam Ras, Rakta, Mansa
3	Samhanana (Body built up)	Madhayama
4	Pramana (Anthropometric measurement)	Madhyama (Wt.60 kg Ht.5feet 5inch)
5	Satmya (Adatability)	Madhyama
6	Satva (Mental strength)	Pravar
7	Aaharashakti (Food intake and digestion capacity) Abhyavaharan: Jaran:	 Madhyam Madhyam
8	Vyayamashakti (Exercise capacity)	- Avara
9	Vaya (Age)	Madhya Vaya
10	Desha (Habitat)	- Sadharana

Table 2: Astavidh Pariksha (Eight fold Examination)

1	Nadi (pulse)	92/Minute, Regular
2	Mutra (urine)	Kricchrata
3	Mala (stool)	Samyaka
4	Jihva (tongue)	Nirama
5	Shabda (sound)	Spashta
6	Sparsha (touch)	Samsheetoshna
7	Drika (eye)	Prakrita
8	Aakriti (built)	Madhyama

*Dosha: Vata, Kapha
*Adhisthana: Pakwashaya
*Dushya: Rasa, Rakta,Mansa, Mutra
*Sthanasanshraya: Mutramarga

Samprapti (Pathology)

According to Acharya Charaka, the Basti is Vatasthana and Apana Vayu is seated at testicles, bladder, anus and penis etc. and responsible for normal evacuation of bladder, bowel, and ejaculation.The diseases occurring in this region are mainly due to Vata Dusti. Increase in Khara, Ruksha Guna responsible for local constriction and hardening of tissues leading to constriction of urethra. Increase in Chala Guna leading to frequent micturition and cause pain. When Vayu get stage of Prakopa it causes Mutra Sanga, Toda (pricking pain), Sankoch (Stricture), Shosha and Shoola. Kapha Prakopa is manifested with Sthairya as local stasis, Gaurava as heaviness in penis in Mutra Sanga, Upalepa (narrowing of lumen) due to hypertrophied scar tissues, Bandha (obstruction to normal flow) Chirkaritva. Hence combination of Vata +++ and Kapha + is causative factor Doshas behind the Mutramarga Sankoch i.e. Urethral stricture. Urethral passage is lined by mucosa which is Shleshma dhara kala / internal lining which may be considered as Upadhatu of Mamsa. It gets affected and diseased mucosa promoted the disease to sub mucosal structure and their involvement lead to stricture. Twacha is Upadhatu of Mamsa which is nourished by Rasa and Rakta hence in this disease Rasa, Rakta, Mamsa are affected Dhatus. Mutravaha Strotas is involved hence Mutra is among the Dushyas.

2. Materials & Methods

The foremost content obligatory for Uttar basti is oil or decoction. As Uttar basti is the procedure of administration of drug in the form of oil or decoction per urethral or per vaginal route. In this study, 40ml oil, and 125 mg Saindhav lavan with honey was used.
Other required instrument were –

- Disposable syringe 50ml
- Surgical glove

- Infant feeding tube no. 6
- Betadine solution
- Gauze piece (sterilised)
- Sponge holding forcep
- Yasthimadhu Taila
- Saindhav lavan
- Honey
- 2% lidnocaine jelly
- Clamp

Diagnostic assessment of patient: -

- Routine haematology
- Urine investigations
- RGU (retrograde urethrogram) shows posterior urethral spasm.

Investigation:

- Hb-14.6,
- RBC-4.52,
- WBC-5900
- BT – 1.36 minutes
- CT – 4.06 minutes
- PLETLET COUNTS -2250000
- HIV/HBSAG/HCV-non reactive
- RBS – 88 mg/ml and
- Urine examination –

Physical examination

- Volume – 20 ml
- Colour – pale yellow
- Blood – absent
- Deposit – absent
- Appearance – clear

Chemical examination

- Sp. gravity- 1.000
- Protein- absent
- Glucose- absent
- Ketone- absent
- Urobilinogen- absent
- Bile pigment- absent
- Reaction- 6.0

Microscopic examination

- Pus cell- 1-2/ HPF
- Red cells- absent
- Epithelial cells – absent
- Casts – absent
- Crystals – absent
- Yeast cells – absent
- Trichomonas Vag – absent
- Bacteria – absent

- Ultrasonography – Kidney was normal, Bladder – Coarse Mucosa in bladder, residual urine is 55 cc. this residual urine may be related to stricture urethra
- Uroflowmetry-

I. Voiding time 058.2 sec
II. Flow time 108.1 sec
III. Time to max flow 030.6 sec
IV. Voiding volume 0203 ml

Treatment Administered:

Both medicinal and procedural therapies were administered in the patient. The details are mentioned in **-**

Details of Medicine administered

S.N.	Drug	Dose	Anupan	Duration
1	SANSHAMANI VATI	2 BD before food	Luke warm water	15 days
2	TRIPHALA GUGGULU	2 BD before food	Luke warm water	15 days
3	ERUND BHRISTHA HARITAKI	3 HS	Luke warm water	7 days
4	SYP NEERI	2 TSF bd	Luke warm water	One month
5	CHANDRA PRABHA VATI	2 BD after food	Luke warm water	One month

Detail of Uttar Basti procedure

S.N	Procedure	Dose	Drug	Duration
1	UTTAR BASTI	40 ml	Yasthimadhu Taila	21 days

Procedure

Purvakarma (pre-operative)

- All the needed investigations are done and necessary vitals are taken at first.
- Patient is asked to void urine, and be free from natural urges.
- Then asked to lie in supine position with cloth undone.
- Then Antiseptic care is given.

- Then luke warm autoclaved Yashtimadhu taila is mixed with rock salt and honey.

Pradhan karma(operative)

- Thus obtained Yashtimadhu taila is loaded in 50 ml disposable syringe.
- The penile region is painted by betadine with help of betadine soaked gauzes and sponge holder.
- Then penis is retracted and cleaned by betadine solution.
- Then fetal feeding tube is inserted and when it reaches bulbo membranous urethra patient is asked to take deep breathe. Further fetal feeding tube is inserted till it reaches bladder.
- Then the medicated oil mixture is passed through fetal feeding tube by the help of syringe in one shot.
- Then the fetal feeding tube is removed and prepuce is repositioned to avoid phimosis.
- Patient is asked to remain in same position till 30 minutes.
- This process is done in alternative days or in interval of 3 days for 7 sittings.

Paschat karma (Post-Operative)

- Patient is avoided to micturate till 2 hrs after procedure.
- Post procedure vitals are taken and noted.
- Patient is called for followup on regular interval.

Contraindications.

- Hypo/ Epispadias
- Carcinoma of penis
- Diabetes Mellitus
- Anatomical urethral stricture
- Phimosis
- Hypersensitivity

Observation & Result

Incomplete emptying, frequency, weak stream, dribbling and straining, burning micturition were assessed during the course of study. The efficacy of procedure was assessed on the basis of following criteria

1. Retrograde urethrogram
2. Frequency of micturition
3. Burning micturition

After 21 days of this procedure it was observed that patient felt 80% decrease of symptoms and after 1 month of treatment. The report of urethrogram of patient who underwent through this procedure shows that there is marked increased in calibre of lumen and increase inflow rate by about 3 times.

3. Discussion

Mutra marga samkocha is due to predominance of vata and kapha dosha. Where as dushyas are rasa, rakta,mamsa. sleshmadhara kala(mucous membrane) . As the act of micturition is under the control of apana vayu, when it gets vitiated urinary defects arise. Due to vitiation of vata dosha chala, ruksha, khara guna increases in mutramarga resulting in mutramarga samkocha. Hence for the treatment of mutramarga samkocha vata and kapha should be passified, which is done by different medicine used in procedure called uttarbasti. In this Basti, yasthimadhu taila are having Snigdha Guna, Ushana Virya, properties which favour normal functioning of Kapha and Vata Dosha. Hence, helps in Samprapti Vighatana of the Mutramarga Sankocha. It softens tissue, increases elasticity, penetrates up to deep tissue, heals and promotes regeneration. Saindhav Lavan has Chedana, Bhedana, Margavishodhankara and Sharir Avayava Mridukar quality. The Saindhava acts as Anulomak of Dosha and Sandhankara and ultimately Mutramarga Vishodhana results. Thus the study confirms the curative role of Uttarbasti in Mutramarga Sankoch. It shows better results as compared to present common techniques. In other aspect we can say that it reduces the fibrosis in stricture part of urethra. Mechanically uttarbasti does the dilatation of the urethral canal and increase the stretching of contracted part.

4. Conclusion and Recommendation

Uttar basti plays an vital role in treating urinary disorders when applied with strict aseptic precautions and extreme carefulness. It is primarily due to direct application of drug locally on target organs which has also been proved scientifically. A detailed history with proper indication and skills are required to do

uttar basti. Therefore from this case study we can accomplish that uttar basti shows significant results in urethral stricture.

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Conflict of interest
There are no conflicts of interest.

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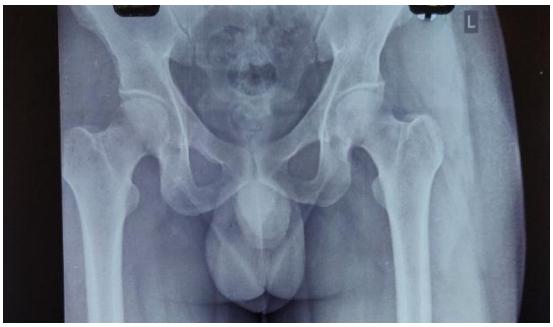
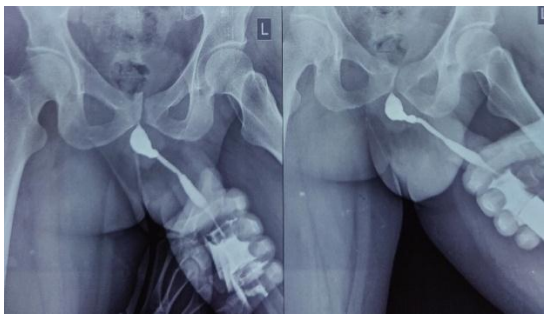
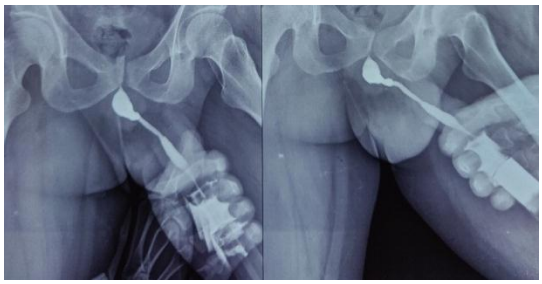
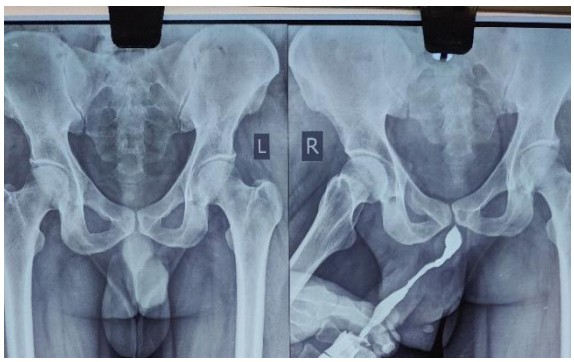
Before Treatment

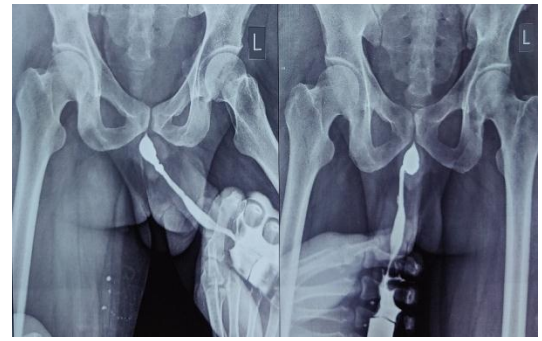


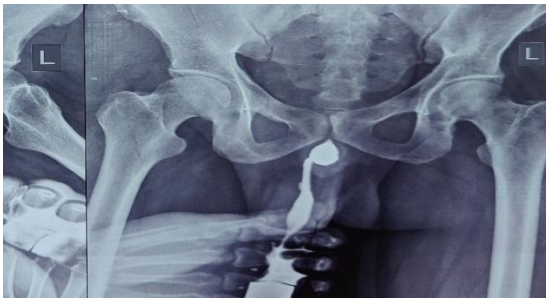




After Treatment







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