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Gokshura Kashaya Bladder Wash in the management of Mutrakruchra with special reference to Urinary Tract **Infection : A Case Study**

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ABSTRACT

Urinary tract infection is a common disorder accounting for 1-3% of consultation in general medical practice. Urinary tract infection is a term used to describe Acute urethritis and Cystitis caused by microorganism. In Ayurveda, the disease Mutrakruchra is mentioned in almost all classical texts with different signs, symptoms and treatment modalities, reflecting its prevalence in ancient period, which can be correlated to urinary tract infection. Acharya Sushrutha has explained the treatment of Mutrakruchra in detail by mentioning various internal medications, Anuvasana and Uttara Basti. Numerous studies are done in the management of Mutrakruchra with the internal medication. Here a preliminary attempt to study the effect of bladder wash with Gokshura Kashaya in the management of the same was taken for the study.

Key words: Bladder Wash, Cystitis, Gokshurakashaya, Mutrakruchra, Urinary Tract Infection.

INTRODUCTION

The term Mutrakruchra originates from two words -Mutra and Kruchra and is self-explanatory. The word Mutra is derived from 'Prasrava' means to ooze. The word 'Kruchra' is derived from 'Kashte' means causing trouble or painful. Difficulty or painful micturition is called as Mutrakruchra. "Dukhena Mutra Pravritti" is the classical feature described in our classics, which is referred as any discomfort during micturition or specifically "The painful voiding of urine. Urinary tract infection is a term used to describe Acute urethritis and

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Cystitis caused by microorganism. It is a common disorder accounting for 1-3 % of consultation in general medical practice.^[1]

Typical features of cystitis and urethritis includes^[2]

- a) Abrupt onset of frequency of micturition and urgency
- b) Dysuria
- c) Suprapubic pain during and after voiding
- d) Strangury (~intense desire to pass urine after micturition, due to spasm of the inflamed bladder wall)
- e) Urine may appear cloudy and have unpleasant odour
- Microscopic or visible haematuria. f)

Long-term or frequent use of antibiotics may be harmful and moreover, with rapidly emerging resistance to antibiotics it is becoming increasingly difficult to treat the infection. Use of systemic antibiotics also places patients at risk for drug toxicities and adverse reaction.^[3] With this aspect need of an alternate therapy is essential.

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In Ayurveda, *Acharyas* have mention *Uttara Basti* as one among the *Chikithsa* of *Mutrakruchra*.^[4] Even though in the classics there is no direct explanation of bladder wash, a modified method of *Uttara Basti* for the bladder wash was taken for this study.

The choice of the drug Gokshura was done on the basis of its properties like Basti Shodhaka, Krimighna, Shotahara, Mutravirechaniya etc.^[5] Acharya Charaka has mentioned Gokshura as an Agrya Dravya for Mutrakruchra.^[6] And also, Few studies have shown Gokshura to have Anti-inflammatory and Anti-Bacterial properties.^[7] Numerous studies are done in the management of Mutrakruchra with the internal medications but the lesser bioavailability of the drug through oral administration would lead to long term usage of these medicines, prolonging the agony of the affected.^[8] Unlike contemporary science, In Ayurveda there are no published studies on the effect of Bladder wash in Urinary tract infection hence this study is undertaken to introduce much safer and diligent Ayurvedic care plan in the subjects with urinary tract infection.

AIM AND OBJECTIVE

To evaluate the role of *Gokshura Kashaya* Bladder Wash in the management of *Mutrakruchra* with special reference to Urinary Tract Infection

MATERIALS AND METHODS

Table 1: Properties of Gokshura^[9]

Drug	Gokshura			
Botanical name	Tribulus terrestris Linn.			
Family	Zygophyllaceae			
Synonyms	Ikshugandhika, Svadamstra, Trikantaka, Swadukantaka, Palankasha			
Vernacular names	English - Cow hage Kannada - Sannanaggillu Hindi - Gokhuru Telugu - Palleru Tamil – Neringil			

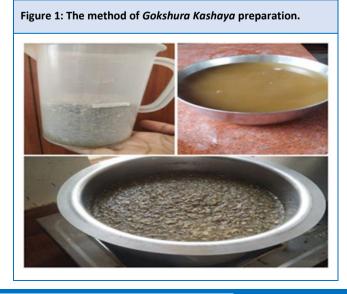
Rasa	Madhura			
Guna	Guru, snigdha			
Veerya	Sheeta			
Vipaka	Madhura			
Prabhava	Vata-Pitta Hara, Vrshya, Mootrala, Rasayana. Acc to BP: Sheetala, Bastishodhana, Prameha Swasa Kasa hara.			
Part used	Panchanga (fruit is taken for the study)			

CASE STUDY

It is a case study of an 85 years old Male patient who presented with the chief complains of burning and painful micturition repeatedly since 3years. He was being treated with oral antibiotics and catheterized multiple times. The patient has developed resistance to most of the antibiotics. Study was done after obtaining an informed consent from the patient. He was treated with the prepared *Gokshura Kashaya* in the form of Bladder wash.

Intervention

Gokshura Kashaya was prepared with all aseptic measures, as per the classical reference of *Kashaya Kalpana*, one part of *Kwatha Choorna* was boiled in eight parts of water and reduced to $1/4^{\text{th}}$ quantity.^[10] The prepared *Kashaya* was allowed to cool down to body temperature and double filtered using kora-cloth.



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With all aseptic measures catheterization was done, 200ml of the prepared *Gokshura Kashaya* was pushed into the bladder using Asepto syringe, catheter was clamped for 20mins, later was unclamped and the fluid was allowed to drain into the Urobag. Bladder wash was done with the *Gokshura Kashaya* once daily for 7 days and observations were done on 5th and 7th day of the treatment.

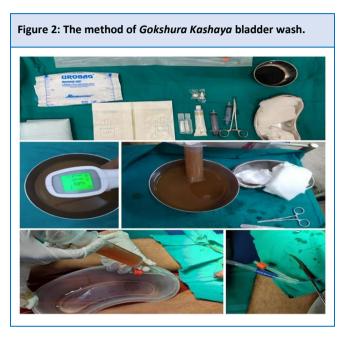


 Table 2: Subjective symptoms assessed before and after the bladder wash was as mentioned in the table.

Symptoms	0 No Pain	1-3 Mild pain	4-6 Moderate pain	7-10 Severe pain
Pain Assessment (Before treatment)	-	-	+	-
After treatment	-	+	-	-
Symptoms	Grade 0 No burning	Grade 1 Mild burning	Grade 3 Moderate burning	Grade 4 Severe burning
Burning Sensation (Before treatment)	-	-	-	+

After + - - - -Treatment

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Table 3: Objective symptoms assessed before andafter the bladder wash was as mentioned in the table.

Urine Test	Before treatment	5 th day of treatment (15/3/22)	7 th day of treatment (17/3/22)
Physical Examination			
Volume	20ml	20ml	20ml
Colour	Pale yellow	Pale yellow	Pale yellow
Action	Acidic	Acidic	Acidic
Appearance	Hazy	Turbid	S-Turbid
Chemical Examination			
Albumin	Present (+)	Present (+)	Traces
Sugar	NIL	NIL	NIL
Microscopic Examination			
Pus cells	Plenty	35-40	15-20
EPI cells	1-2	4-6	4-6
RBC'S	6-8	6-8	3-5
Cast/ crystals	Not Seen	Not Seen	Not Seen
Amorphous Urates	Not Seen	Not Seen	Not Seen
Amorphous Phosphate	Not Seen	Not Seen	Not Seen
Others	Bacteria seen	Bacteria seen	Bacteria seen

RESULTS

Complete reduction of Symptoms along with reduced Pus cells count was achieved within 7 days of Bladder wash.

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DISCUSSION

Gokshura Kashaya having alkaloids, flavonoids, tannins and phenolic compounds possess antibacterial property and also Acharya Charaka has included Gokshura in Krimighna Dashemani and in the treatment of Mutrakruchra, with this we may infer that Gokshura Kashaya used in the bladder wash may inhibit the bacterial growth by acting directly on the surface of bladder wall and flushing out the bacteria. In the present case Gokshura Kashaya bladder wash seems to have shown promising results in the successful management of urinary tract infection with ease and devoid of any complications. Thus, Gokshura Kashaya bladder wash helps in reducing the symptoms and thereby reducing the infection. Gokshura having Madhura rasa and Sheeta Veerya also helps in relieving Pitta Dusti which plays a major role in manifesting infection with burning sensation. Further clinical study is needed to evaluate the effectiveness in larger sample.

CONCLUSION

Significant relief on symptoms of *Mutrakruchra* including burning sensation, painful micturition, pus cells etc was being observed in the course of treatment. There was better recovery and sustained therapeutic effect in this patient with the *Gokshura Kashaya* bladder wash. Thus, paving a way for the treatment with ease in case of resistant and recurrent urinary tract infections.

REFERENCES

- Stanley Davidson. Kidney and urinary tract disease In: Brian Walker R, Nicki Colledge R, Stuart Ralstin H, Ian Penmsan D, editors. Davidson's Principles & Practice of Medicine. 22nd ed. London: Elsevier publication; 2014. p.511.
- Stanley Davidson. Kidney and urinary tract disease In: Brian Walker R, Nicki Colledge R, Stuart Ralstin H, Ian Penmsan D,

editors. Davidson's Principles & Practice of Medicine. 22nd ed. London: Elsevier publication; 2014. p.511.

- Waites KB, Canupp KC, Roper JF, Camp SM, Chen Y. Evaluation of 3 Methods of Bladder Irrigation to Treat Bacteriuria in Persons with Neurogenic Bladder. The Journal of Spinal Cord Medicine [Internet]. 2006 Jan [cited 2021 Jul 13];29(3):217– 26.
- Aacharya JadavajiTrikamji editor. Susrutha, Susruthasamhitha, Uttaratantra. Ch.59,Ver.15-27.Reprint.Varanasi:Choukhambha Surbharatiprakashan, Kashi Sanskrit series 42;2019.p.793-894.
- Sharma RK, BhagwanDash., editor. Charakasamhita of Agnivesh, Sutrasthana. Ch.4. Ver.11,15,16. Reprint.Varanasi: Chaukamba Sanskrit series, 2012.p.96-97.
- Sharma RK, BhagwanDash., editor. Charakasamhita of Agnivesha, Sutrasthana.Ch.25, ver.40. Reprint. Varanasi: Chaukamba Sanskrit series,2012.p.425-7.
- Ştefănescu R, Tero-Vescan A, Negroiu A, Aurică E, Vari C-E. A Comprehensive Review of the Phytochemical, Pharmacological, and Toxicological Properties of Tribulus terrestris L. Biomolecules [Internet]. 2020 May 12 [cited 2021 Jul 13];10(5):752.
- Moussa M, Chakra MA, Papatsoris AG, Dellis A, Dabboucy B, Fares Y. Bladder irrigation with povidone-iodine prevent recurrent urinary tract infections in neurogenic bladder patients on clean intermittent catheterization. Neurourology and Urodynamics [Internet]. 2021 Jan 21 [cited 2021 Jul 14];40(2):672–9.
- Sastry J L N. DravyagunaVijnana.Vol.2. Reprint. Varanasi: Chowkamba Orientalia, Jai krishna das Ayurveda series 114; 2012. p.98-100.
- Shoba Hiremath G. Panca-VidhaKasaya Kalpana.Ch.9. A text book of Bhaisajya-kalpana .7th edition reprint. Bangalore: Adiga H K L; 2015,p.102.

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