



# Clinical Study To Evaluate The Role Of Chandraprabha Vati And Gokshuradi Guggul In The Management Of Mutrakricchra

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**Abstract:** Sushrut Samhita and Charak Samhita are the two major ancient texts of Ayurveda. Both the Samhitas cover surgical and conservative aspects of treatment modalities respectively and are a part of Brihatrayee. As Ayurveda is a science of life, the treatment protocols mentioned here are of natural origine and carry immense potential to cure a disease from it's root, avoiding recurrence and minimizing the possible complications that may be seen in contemporary treatment. UTI<sup>1</sup> may be defined as a condition in which the bacteria invades, persists and multiplies within the urinary tract. 13 types of Bastirogas mentioned in the Trimarmiyasiddhi adhyaya<sup>2</sup> from Charak Samhita mainly focuses on vyadhis caused by vitiation of Vata dosha with Pitta and Kapha being the Awarakas (Covering agents). In Mutrakricchra, urinary tract infections can occur due to various bacteria, potentially leading to severe infections. A significant issue worldwide is the multidrug resistance of these bacteria to antimicrobial drugs. Additionally, contemporary treatments often come with unwanted side effects. Therefore, exploring new sources of antimicrobial agents and evaluating the effectiveness of drugs mentioned in ancient texts is both valuable and necessary. Chandraprabha Vati and Gokshuradi guggul vati has been studied for their action on Mutravaha strotas. The present clinical study has been conducted to evaluate the combined role of Chandraprabha vati and Gokshuradi Guggul vati in the management of Mutrakricchra.

**Key Words** - Mutrakricchra, Urinary tract infection, Dysuria, Mutravaha strotas

## I. INTRODUCTION

Sushrut Samhita, an ancient text of significant historical importance, emphasizes mostly on Surgical management of the diseases along with the Anushastrakarmeeya and Medicinal management, whereas Charak Samhita focuses solely on Medicinal management. Mutrakricchra, a common disorder of Mutravaha strotas (the urinary tract), is characterized by Krichhrata (painful voiding) as a cardinal sign<sup>3</sup>. Acharya Sushruta described Mutrakricchra in Uttartantra, classifying it into 8 types<sup>4</sup>: Vaataja, Pittaja, Kaphaja, Sannipataja, Abhighaataja, Shakrutaja, Ashmarija. Specifically, Vaataja Mutrakricchra<sup>5</sup> presents with symptoms like Alpam-alpam Mutrapravrutti (dribbling micturition), Samutpeedyam (pressing on as having a feeling of incomplete evacuation of the urinary bladder), Faladbhireeva (tearing/scalding pain) in the scrotum, penis, and bladder, and Krucchrena (difficulty urinating/dysuria), which closely resemble urinary tract infection (UTI) as understood in modern science. UTI involves bacterial invasion, persistence, and multiplication in

the urinary tract, typically caused by Gram-negative bacteria like Escherichia coli. The resemblance between UTI and Mutrakricchra has been studied earlier and established<sup>6</sup>. Chronic/recurrent UTI is a commonly treated condition worldwide, responsive to antibiotics but with a high recurrence rate due to bacterial colonization at the urethral opening. UTI is more prevalent in women than men, with 50-80% of women experiencing UTI at least once in their lifetime. According to global epidemiology data from NCBI<sup>7</sup>, the prevalence rate of urinary tract infection in urology departments is approximately 5.1%. Chandraprabha vati<sup>8</sup> is a classically indicated and proven medicines for Mutrakricchra along with its action against E coli<sup>14</sup>. It is Vyadhipratyanika by its Shothahar, Dahagna, Mutral, Shoolahar gunas, pacifying Vaat and Pitta doshas, rejuvenating properties improving the Kha- vaigunya.<sup>15</sup> It helps in correcting the agni, there by overcoming the pathogenesis of Mutrakricchra. Gokshuradi Guggul<sup>9</sup> is indicated in Prameha, Pradara, Vaatarakta, Mutraghaat and Mutrashmari and has Pramehaghna, Kaphamedahar, Strotoshodhan and Rasayan action. The few components of Gokshuradi guggul belongs to the Mutravirechaneeya and Mutravirajaneeya ganas. Thus, clinical study has been conducted to evaluate the combined role of Chandraprabha vati and Gokshuradi guggul vati in the management of Mutrakricchra to study its Bastishodhak, Vedanasthapak, Mutrakricchrahara, Shothahar properties along with its Diuretic action with Vaatanulomana.

## II. MATERIALS AND METHODS

### Study Design

Single-arm open label clinical trial with pre and post design adapted. 35 patients of Mutrakricchra fulfilling the criteria for the inclusion were selected randomly for the study from OPD and IPD, irrespective of their age, sex, religion, etc.

### Diagnosis Criteria

The diagnosis criteria were based on classical symptoms like Sashool mutrapravrutti (Pain / Dysuria), Sadaha mutravravrutti (Burning micturition), Muhurmuhur mutravravrutti (Dribbling causing frequency of micturition).

### Selection Criteria

The patients were taken for the study as per the following Inclusion and Exclusion criteria.

#### 1. Inclusion criteria

- Between the age group 18 -70.
- Patients with history of more than one episode of LUTI as per the history given by patient.
- Patients showing classical signs and symptoms of Mutrakricchra.
- Patients with mild to moderate degree BPH with classical signs and symptoms of Mutrakricchra.
- Patients with non- obstructive urinary calculi.
- Patients with mild haematuria not seen with naked eyes and showing up to 10 RBC/hpf in Urine routine - microscopic.
- Patients with pus cells up to 20/hpf in Urine routine - microscopic.
- Both fresh and treated patients were selected.
- Patients were included irrespective of their caste, religion, economic status, occupation.
- Patients of both genders were included.
- Patient giving consent were included.

#### 2. Exclusion criteria

- Patients with acute and active LUTI.
- Patients with gross hydro-nephrosis, gross hydro-ureter, acute pyelonephritis, complete urethral stricture and with moderate to severe degree bladder outlet obstruction including BPH.
- Patients with gross haematuria seen with naked eyes or with 11 and above RBCs/hpf in urine routine microscopic examination.
- Patients with 21 and above pus cells/hpf.
- Patients with Carcinoma of urinary tract and Carcinoma of prostate.
- Patients with septicaemia.
- Patients with Chronic renal failure.
- Pregnant women.

– Patient with any major co-morbid such as DM, Hypertension, etc.

### 3. Withdrawal criteria

- Sudden increase in signs and symptoms.
- Patient with anaphylactic reaction towards drug or patients with any occurred complication during or after the procedure.
- Those patients refusing treatment in spite of the consent given before.
- Patient skips follow up or doesn't follow treatment sincerely.

## MATERIALS

Chandraprabha Vati and Gokshuradi Guggul Vati were purchased from GMP certified pharmacy

## METHODS

### Treatment protocol

Patients were administered with oral administration of Chandraprabha Vati 500 mg BID and Gokshuradi guggul 500mg BID for 21 days. The assessments were done on every 0<sup>th</sup>, 3<sup>rd</sup>, 7<sup>th</sup>, 10<sup>th</sup>, 14<sup>th</sup> and 21<sup>st</sup> day.

### Dose

Drugs	Dose	Frequency	Route	Anupan	Duration
Chandraprabha Vati	2 tablets (250mg each)	Twice a day	Orally	Koshna Jal	21 days
Gokshuradi Guggul	2 tablets (250mg each)	Twice a day	Orally	Koshna Jal	21 days

**Table No. 01: Treatment protocol**

### Assessment

Assessments were done on every 0<sup>th</sup>, 3<sup>rd</sup>, 7<sup>th</sup>, 10<sup>th</sup>, 14<sup>th</sup> and 21<sup>st</sup> day using following subjective and Objective criteria.

#### a. Subjective criteria

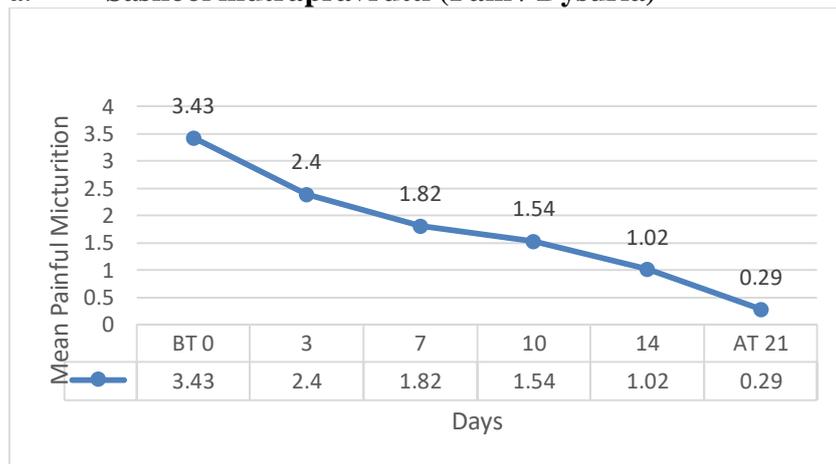
1. Sashool mutrapravrutti (Pain / Dysuria)  
Assessment done on every follow up.
2. Sadaha mutrapravrutti (Burning micturition)  
Assessment done on every follow up.

#### b. Objective criteria

1. Muhurmuhur mutrapravrutti (Dribbling causing frequency of micturition)  
Assessment done before and after treatment
2. Pus cells from Urine R+M  
Assessment done before and after treatment
3. RBCs from Urine R+M  
Assessment done before and after treatment
4. TLC (Haemogram)  
Assessment done before and after treatment
5. Urine flow rate – Ratio calculated between 'Amount Of Urine Voided In ml' and 'Time Of Micturition In Seconds' from first voiding in the morning  
Assessment done on every follow up.

### III. RESULT

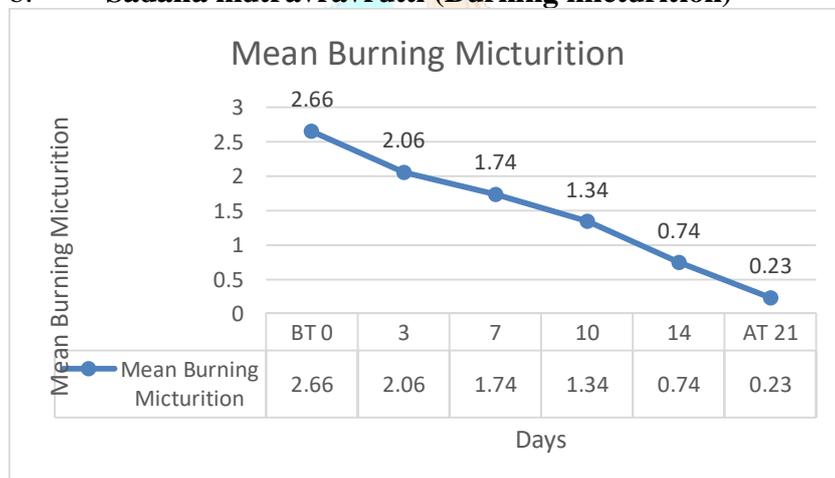
#### a. Sashool mutrapravrutti (Pain / Dysuria)



Graph no. 1

Above graph shows the gradual decrease in mean gradation of Painful micturition at each follow up.

#### b. Sadaha mutravravrutti (Burning micturition)



Graph no. 2

Above graph shows the gradual decrease in mean gradation of Burning micturition at each follow up.

#### c. Muhurmuhur mutrapravrutti (Dribbling causing frequency of micturition)

The mean score of Muhurmuhur mutrapravrutti reduced by 5.629 times. P value is  $< 0.05$ , which shows that there was significant difference in Muhurmuhur mutrapravrutti before treatment and after

#### d. Pus cells from Urine R+M

The mean score of Pus cells in Urine R-M reduced by 9.371 /hpf. P value is  $< 0.05$ , which shows that there was significant difference in Pus cells in Urine R-M before treatment and after treatment.

#### e. RBCs from Urine R+M

The mean score of RBC in Urine R-M reduced by 2.2 /hpf. P value is  $< 0.05$ , which shows that there was significant difference in RBCs in Urine R-M before treatment and after treatment.

#### f. TLC (Haemogram)

The mean score of TLC reduced by 1291.429/cumm. P value is  $< 0.05$ , which shows that there was significant difference in TLC before and after treatment.

#### g. Urine flow rate –

The mean score of Urine flow rate increased by 6.7ml/sec. P value is  $< 0.05$ , which shows that there was significant difference in Urine flow rate before treatment and after treatment.

## Changes in the parameters of Mutrakricchra

### a. Subjective parameters

Symptoms	Mean Score			Sample size	P value
	B.T.	A.T.	Diff.		
Sadah mutrapravrutti	2.66	0.23	2.43	35	<0.05
Sashool mutrapravrutti	3.43	0.29	3.14	35	<0.05

Table no. 2

### a. Objective parameters

Symptoms	Mean Score			Paired t-test	Sample Size	P value
	B.T.	A.T.	Diff.			
Muhurmuhur mutrapravrutti	11.2	5.571	5.629	18.499	35	<0.05
Pus cells in Urine R-M	11.4	2.029	9.371	24.929	35	<0.05
RBC in Urine R-M	2.886	0.686	2.2	8.109	35	<0.05
TLC	6291.429	5000	1291.429	6.17	35	<0.05
Urine flow rate	8.36	15.057	6.697	30.793	35	<0.05

Table no. 3

## IV. DISCUSSION

In patients of Mutrakricchra, after the treatment protocol of Chandraprabha vati, and Gokshuradi Guggul, 22 (84.90%) patients were cured and 13 (15.10%) patients were improved. Also, burning micturition improved in 22.86% patients, and got cured in 77.14% patients. Frequency of micturition improved in 17.14% patients, and got cured in 82.86% patients. Painful micturition improved in 28.57% patients and got cured in 71.43% patients. Pus cells from urine routine microscopic were absent in 100% of patients. RBCs from urine routine microscopic were absent in 100% of patients. TLC improved in 100% of patients. Urine flow rate improved in 37.14% patients and got cured in 62.86% patients

### Probable mode of action of Chandraprabha vati in Mutrakricchra

It constitutes total 37 ingredients among which 28 are herbs, 3 are mineral salts, 2 alkalis, 2 metal ashes, sucrose and asphalt mineral pitch. Chandraprabha vati is used as a diuretic and has Tridoshaghna property and mainly it is Vaata-kaphashamak. The Ushna veerya drugs Trivrutta, Pippalimool, Guggula and Yavakshar reduces Ruja. Karpura, Musta, Devdaru, Guggula, Triphala, Ela, Shilajatu and Makshik Bhasma carries Anti-inflammatory properties. Shilajatu and Guggula by their Virukshan and Chhedan guna acts on kapha dosha. They also act by their rasayana effect. Pittahara guna reduces Sadaha and Sarakta mutrapravrutti by anti-inflammatory and analgesic action of the constituent drugs. Madhura rasa dravyas pacify Vata and Pitta dosha. Tikta and Kashaya Rasa drugs by their Mutrala action increase the amount of urine, thereby decreasing the concentration of urine. It is proved to be effective against E.coli due to antiseptic and antibacterial or Krimihara properties of drugs in it. It has Rasayana effect which rectify the Kha-vaigunya in the Mutravaha Strotas when used for long duration. Guggulu with its Shothahara, Lekhana and Krimighna properties relieves the inflammatory pathology in UTI, while Swarnamakshika improves the bladder tone.

Overall Chandraprabha vati brings about the Shodhana of Bahudrava shleshma to reduce the vitiated kleda because of the Laghu and Ruksha gunas which further give relief from the symptoms such as Muhurmuhur mutrapravrutti and Krichhrata.

### Probable mode of action of Gokshuradi Guggulu in Mutrakricchra:

It is a component made up of 9 ingredients, viz. Gokshura, Guggula, Haritaki, Bibhitak, Aamalaki, Musta, Pippali, Maricha and Shunti. Usnhaveerya of Guggul works against Vaatadosha and brings about Kaphavaatashaman, antiseptis, enriches blood demulcent and is antispasmodic and carminative. Madhur rasa and vipaka, Sheeta veerya and Guru-Snigdha gunas of Gokshur brings about the Vatahar and Bastishodhana karma relieving Strotodushti. Gokshur and Musta with their mutral action helps to wash out the impurities from the urinary tract. Guggul, Amalaki and Pippali acts as a Rasayana with the Prabhava by potentiating oxygen delivery systems and improving cell membrane permeability and acts as an antioxidants.

Thus overall the Mutravirechaneeya, Mutrakrichhrahara, Vaatapittashamak and Ammapachan activities of Gokshuradi Guggul makes the pH of urine alkaline, reducing the inflammation and thus soothing the epithelial layer of urinary tract (Mutravaha strotas).

## V. CONCLUSION

Oral administration of Chandraprabha vati and Gokshuradi guggul was found significant in increasing Urine flow rate, decreasing Frequency of micturition, Burning micturition and Dysuria in Mutrakricchra.

## VI. REFERENCES

1. Munjal Y P, API textbook of Medicine, Volume 2, New Delhi- Jaypee Brothers Medical Publishers (P) Ltd., 2015, Page no. 1791
2. Sharma PV, Caraka Samhita Volume II, Chaukhambha Sanskrit Pratishthan, Delhi, 2010, Siddhisthana, Adhyaya 09, Shloka no. 25-26, Page no. 950
3. Upadhyay Y, Madhav Nidanam Part 1 of Sri Madhavkara, reprint, Varanasi- Chaukhambha Prakashan, 2010, Page 552
4. Thakral K K, Sushrut Samhita Uttaratantra, Chaukhambha Orientalia, Varanasi, 2019, Adhyaya 58, Shloka no. 03-04, Page no. 556.
5. Thakral K K, Sushrut Samhita Uttaratantra, Chaukhambha Orientalia, Varanasi, 2019, Adhyaya 59, Shloka no. 04, Page no. 571.
6. Ashrafi B, Goswami A, Devi B, Sharma R, Mutrakrichhra (Urinary Tract Infection): A review based on Ayurveda and Modern perspective, WJPR, 2017, Aug 20th, ISSN 2455-3301, Page no. 128 to 132
7. Chatterjee N, Chatterjee C, Ghosh S, Mukhopadhyay M, Brahmachari R, Patar K, Pattern of Urinary antibiograms in tertiary care Hospital of Eastern India, JAPI, 2016 April, Vol 46. ([http://www.japi.org/april\\_2016/04\\_oa\\_pattern\\_of\\_urinary.html](http://www.japi.org/april_2016/04_oa_pattern_of_urinary.html))
8. Anita dwivedi, Jitendrakumar Nathabhal Varsakiya, Poorva Sharma, Divyarani Kathad Clinical effect of Chandraprabha Vati and Gokshura churna in the Management of Ashmari: A Case Report. Int. J. AYUSH CaRe. 2025;9(2):320-326. (<https://doi.org/10.70805/ijacare.v9i2.709>)
9. Rohan Lokhande et al: Ayurvedic Management of Mutrakrichra: A Single Case Study. International Ayurvedic Medical Journal {online} 2023 {cited November2023} ([http://www.iamj.in/posts/images/upload/2934\\_2937.pdf](http://www.iamj.in/posts/images/upload/2934_2937.pdf))