

Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***“To study the efficacy of brihatyadigana kwath in the management of mootrakrichhra w.s.r. to lower UTI”**

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ABSTRACT:-

UTIs are second in position after respiratory tract infections. Symptoms of UTI simulates with Mootrakrichhra Vyadhi which is described in Ayurveda. Brihatyadigana kwatha is mentioned by Acharya Sushruta for treatment of Mootrakrichhra in Sutrasthana.

In present study Brihatyadigana kwatha was given to 35 patients. It is observed that this drug gave remarkable results by reducing the Symptoms Sashool

Mootrapravritti, Sadahamootrapravritti, Muhurmuhu Mootrapravritti and also reduction of Pus cells and RBCs in urine. The statistical tests applied to data clarify results.

Keywords:- Mootrakrichhra, UTIs, Brihatyadigana kwatha

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Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***INTRODUCTION:-**

Diseases may be of different systems. Urinary system is one of them which are frequently affected by symptoms like burning micturation, dysuria, urgency, frequency etc¹. In society, these symptoms resembling to Mootrakrichhra are very common since years to years. Urinary tract infection is commonly caused by organism E. coli, which is leading cause of morbidity & health care expenditures. Other organisms are Proteus mirabilis, Staphylococcus, Streptococcus etc. Women are more prone to U.T.I. due to fast lifestyle, short urethra, unhygienic sex etc. It leads to cause morbidity.² An uncomplicated U.T.I. in healthy women has an incidence of 50/1000/year.³ 50 % of women experiences at least one episode of U.T.I. in their lifetime and 20% to 40% women have recurrent episodes.^{4,5} Approximately 20% of all U.T.I.'s occurs in men.⁶ Sexually active women are mostly affected. It is not so common in men.

In recent era, U.T.I. is managed mainly by antibiotics. Though they are useful, they are having some drawbacks like side effects, teratogenic effects, specific organ toxicity and contraindications in certain conditions or diseases.

It is very essential to provide service which is affordable to all socioeconomic class of society. Treatment should be almost without side effects, toxicity and contraindications.

Considering safer, easy availability, simple preparation method, convenient drug administration, reasonable cost, Kwatha kalpana was found better than any other preparation. Finding even better option to readymade market products and other medicinal forms, Brihatyadigana kwatha⁷ was considered for study. Simple, safe, cost effective therapy is need of society. So, it was selected after Ayurvedic literature review and after discussion with senior experts.

Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***AIM & OBJECTIVES :-****AIM :-**

To assess the Efficacy of “Brihatyadigana” in the form of kwatha in the management of Mootrakrichhra and put forward even better option for treatment of Mootrakrichhra .

OBJECTIVES :-

- 1) To provide complete cure from Mootrakrichhra in shorter duration.
- 2) To study theoretical concept of Mootrakrichhra & Lower Urinary Tract Infection.

To find out safe, cost effective, amble, simple therapeutic regiment having no or minimal ADR's in the management of Mootrakrichhra.

MATERIALS AND METHODS :-

The patients of Mootrakrichhra (35 patients) were selected randomly from outpatient and inpatient department of shalyatantra C.S.M.S.S. Ayurved College and hospital of Kanchanwadi Aurangabad. Brihatyadigana kwatha was prepared as explained in sharangdharsamhita.

Duration of treatment:- 14 days.

Diagnostic criteria:-

Patients having symptoms of Mootrakrichhra like Sadahmootrata, Muhur muhu mootrata, Sashool mootrata etc.

Drug- Bhrihatyadigana kwatha

Dose – 40 ml two times a day.

Route- Oral

Duration- 14 Days, follow up after every 7 days.

Time- After meal twice daily.

Ingredients-Brihati, Kantakari, Kutaj-Beeja, Patha, Yashtimadhu.

Type of study:-Open random clinical study

Sample size:-35

Inclusion criteria:-

1. Patients of age between 15 to 70 years.

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2. Patients of both sexes.
3. Patients having good mental & physical condition with co-operative
4. All patients with burning micturation.
5. Patients agreed for treatment & with informed consent.

Exclusion criteria :-

1. Diagnosed case of lower urinary tract cancer.
2. Any prior surgery which could induce dysuria.

Investigations:-

Haemogram

Urine Examination

Other investigations if necessary.

Criteria for assessment**Subjective parameters:-**

- 1) Sadahmootrata (Burning micturation):-

score 0:-No burning micturation.

score 1:-Mild- rare burning in morning or at starting of micturation.

score 2:-Moderate -tolerable burning at starting & during micturation.

score 3:-Severe;- burning which is not tolerable at starting & prolonged for long time.

- 2) Muhur muhu mootrata (Frequency of micturation):-

score 0:-No frequent micturation (normal 6 to 8 times).

score 1:-Rarely frequent controllable (8 to 10 times).

score 2:-Often frequent not able to control (10 to 12 times).

score 3:-Many times, more than 12.

- 3) Sashool Mootrata (Painful micturation):-

score 0:-No pain.

score 1:-Mild pain occasional only at starting of micturation.

score 2:-Moderate; Tolerable at starting & during micturation.

score 3:-Severe/more, unable to tolerable at starting &

prolonged for long time.

Objective parameters:-

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Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***Urine Examination:-****1) Pus cells:-**

score 0:-0 to 4 p.c./hpf

score 1:-5 to 20 p.c./hpf

score 2:-21 to 40 p.c./hpf

score 3:-Above 40 p.c./hpf

2) No. of RBCs in urine:-

score 0:-No RBCs found in urine (0/hpf).

score 1:-Few RBCs found in urine (0-10/hpf).

score 2:-Moderate number of RBC's found (10-20/hpf).

score 3:-Abundant RBC's found in urine (Above 20/hpf).

Frank blood seen in urine.

RESULT:-**Paired t Test(Table-1)**

Collected data shows that after treatment there was a significant decrease in pus cells and RBCs as compared to before treatment.

Wilcoxon Signed Ranks Test(Table-2)

Data shows that after treatment there was a significant decrease in Sadahamootrapravritti, Sashool Mootrata, MuhurmuhurMootrata score as compared to before treatment.

Preparation of the Brihatyadigana**Kwatha:-**

Brihatyadigana contains Brihati, Kantakari, Kutajbeej, Patha, Yastimadhu. These drugs were selected as per the qualities mentioned in Ayurvedic texts.

Kwath was made as mentioned in Sharangdhar Samhita Madhyamakhand Adhyaya second.⁸

DISCUSSION:-

Out of 5 drugs of the Brihatyadigana kwatha, 3 drugs-Patha, Kantakari, kutajbeej have Tikta rasa, 1 drug- Brihati have Katu rasa and remaining 1- Yashatimadhu having Madhura rasa. Out of five drugs, 4 drugs having Katu Vipaka and remaining 1 drug- Yashtimadhu having Madhura Vipaka. Three drugs- Brihati,

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Kantakari, Patha having Ushna Veerya and remaining two having Sheeta Veerya.

Tikata rasa is Pitta Kapha shamaka, Kapha chhedak, Vrana shodhak, Jvara prashamak and Stanya shodhak. Katu rasa is Kapha nashaka, Vrana shodhak and krimi nashak. Madhura rasa is Vata-Pitta shamaka. It is Dahashamak, Rasa-Rakta prasadak, Dhatusvardhak, sandhankara, trishna prashamana, Jeevaniya and balya. Sheeta veerya is Pittashamaka. Ushna Veerya is Vata Kapha shamaka. Considering all these properties we can say that overall effect is Tridosha Shamaka.

Due to above mentioned actions, most probably Brihatyadigana kwatha breaks Samprapti of Mootrakrichhra and patients may get relief from Mootrakrichhra.

As per pharmacological activity of drugs, most of drugs have antibacterial and anti-inflammatory property. Patha have diuretic property.

It was observed that Brihatyadigana kwatha has better effect in relieving

Sadahmootrata, Muhur muhu mootrata, Sashool Mootrata etc. It also reduces Pus cells and RBCs in urine.

Thus it can be concluded that Brihatyadigana kwatha is not only safe but cost effective drug formulation.

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Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***TABLES:-****Table-1****Paired t Test**

Parameter	Mean	S.D.	S.E.	T	p value	Significance
Pus cells	23.0857E1	10.46	1.76	13.45	0.000	Significant
RBCs	0.34286	0.9056	0.15308	2.240	0.032	Significant

Wilcoxon Signed Ranks Test**Table-2**

Symptoms	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Sadahamootrapravritti	17.50	595.00	-5.308	.000
Sashool Mootrata	16.50	528.00	-5.291	.000
MuhurmuhurMootrata	16.00	496.00	-5.353	.000

Total effect of therapy on 35 patients of Lower U.T.I.**Table-3**

Sr. No.	Total Effect	No. Of Patients	Percentage
1	Excellent/Complete Improved	13	37.14%
2	Marked Improved	16	45.71%

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3	Moderate Improved	5	14.28%
4	Mild Improved	0	0%
5	Unchanged	1	2.85 %

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