

EFFECT OF *USHIRA (VETIVERIA ZIZANIOIDS) HIMA* ON *SADAHA MUTRAPRAVRUTTI (BURNING MICTURITION)* IN GRISHMA RUTU**Smita R. Nagdevte^{1*}, Ramesh M. Bansode² and Sampada S. Sant³**¹PG Scholar, Dept. of Kriya Sharir, Government Ayurved College, Nanded. (MS).²[MD, PhD Ayu], Guide, Professor, Dept. of Kriya Sharir, Government Ayurved College, Nanded. (MS).³[MD, PhD Ayu], Professor & HOD, Dept. of Kriya Sharir, Government Ayurved College, Nanded. (MS).Article Received on
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College, Nanded. (MS).**ABSTRACT**

Presently increasing temperature in the environment is a matter of global concern. The general limit of high temperature tolerance in a healthy individual is about 40°C. In the summer of past few years, temperature of some of the cities in India was recorded around 49°C. According to *Ayurveda* during the *Grishma Ritu* (Summer Season), most of the human being experiences *Pittatmaka Vikar* (Disorders of *Pitta*) such as *Trishnadhikya* (Excessive Thirst), *Daha* (Heat), *Swedadhikya* (Excessive Sweat) etc. This is because, of the *Pittadosha*, which spontaneously and abnormally aggravates in the *Grishma Ritu* (Summer Season). So it is very necessary to adopt certain changes in

the dietary habits as well as in the mode of living to protect the body against the harmful effects of changing environment. The present study was carried out on 30 patients having burning micturition with *ushira hima* for a period of 21 days with *sharkara* as a *Anupana*. Follow up was taken on 7th, 14th and 21st day of treatment. Observation was done before treatment i.e. on 0 day and after treatment i.e. on 21st day. The present study mainly highlighted on the effect of *Ushira (vetiveria zizanioids) hima* on *Sadaha Mutrapravrutti* (burning micturition) in Grishma Ritu.

KEYWORDS: *Ushira hima, Grishma Ritu, Sadaha Mutrapravrutti, Pittatmaka Vikar.*

INTRODUCTION

The structure and organs which are concerned with the production and excretion of *mutra* (urine) are considered under *mutravahasrotasa* (Urinary system) by various *Acharyas*. Burning Micturition is seen as a symptom in many urinary system disorders. Various factors are responsible for it but in *grishmarutu* due to excessive perspiration urine becomes acidic so incidences of Burning Micturition are more. As *Charaka* says that the severity of *Adankala* is at its peak in *grishmarutu* which leads to vitiation of *gunas* like *Tikshna*, *Ushana*, *Ruksha* etc.^[1]

The person who regularly follows Daily Regime, Nocturnal Regime and Seasonal Regime as advised in *Ayurveda* remains always healthy. *Ritucharya* i.e. Seasonal Regime includes season specific diet, behaviour and therapy for the maintenance of *Dosha* (Humours) equilibrium of the body, which in turn maintains our health status. In most of the classical texts of *Ayurveda*, *Madhura*, *Sheeta* and *Drav* regimen is recommended in *Grishma Ritu* (Summer Season). *Panaka* (Syrups), *Mantha* (Thin Gruels), *Hima* and other similar formulations, which are cold, very sweet in taste are the ideal drinks in the *Grishma Ritu* (Summer Season).^[2] *Hima* (Cold infusion) is indicated early in the morning along with raw sugar against *Trishna* (Thirst) and *Antardaha* (Internal burning) in *Sharandhar Samhita*.^[3]

Ushira is known as nectar (*Amrita*) in summers as it lightens all health issues related to heat and summer. It is the best known *Ayurvedic* herb use for pacifying *pitta dosha*. It has thick fibrous adventitious root which are aromatic and used for cooling action. In *charaka samhita* it is mentioned under *dahaprashamana gana* where as in *sushruta samhita* it is mentioned under *pittasanshamana gana*. *Bhavprakash nighantu* states that it is good for *kapha pitta* diseases, heat in the body, difficulties in urination etc.^[4] Hence *Ushira* was chosen for study. *Ushir Hima* can be a cost effective, easily palatable and home based remedy for *Grishma Ritujanya Pittatmaka Vikar* (*Pitta* - Heat disorders due to Summer Season). By considering all the above facts the present research work have been taken up to evaluate its efficacy on Burning Micturition.

AIM AND OBJECTIVE

To evaluate the effect of *Ushira hima* in the management of *Sadaha Mutrapravrutti* (burning micturition) in *Grishma Ritu*.

MATERIAL AND METHODS**MATERIALS**

1. The patients attending the OPD & IPD of *Ayurved* collage & hospital was selected for study.
2. Study of total 30 patients was carried out after appropriate counseling.
3. Patient who is clinically diagnosed with *Sadaha mutrapravrutti* was selected.

METHODS**Inclusive Criteria**

1. Age – 20 to 50 years.
2. Gender – Both male and female.
3. All diagnosed cases of *Sadaha mutrapravrutti*.
4. Patient in OPD and IPD of *Ayurved* hospital.

Exclusive Criteria

1. Patients having similar symptoms associated with renal function impairment.
2. Female patients with pregnancy and lactation.
3. Patients suffering from HTN, DM, IHD, CCF, CRF, TB, ASTHMA etc.
4. Having neurological disorder like convulsion.

Drug Administration Detail

Dose – *UshiraHima* – 40ml

Anupan – *Sharkara*

Sewankal – *Pratahkal*

Route of administration – Orally

Follow up – Follow up will be taken on 7th, 14th & 21st day.

Study Duration – 21 days.

Assessment Criteria**Subjective parameter*****Sadah mutrapravrutti* (Burning micturition)**

Sr. No.	Observations	Grade
1	No burning	0
2	Occasional burning of short duration	1
3	Frequent and prolonged episode of burning	2
4	Continuous interfering with social activity	3

Objective parameter**1. RBCs**

Sr. No.	Range	Grade
1	Absent	0
2	Occasional	1
3	1-3/hpf	2
4	3-6/hpf	3

2. Epithelial cells

Sr. No.	Range	Grade
1	Absent	0
2	Occasional	1
3	1-3/hpf	2
4	3-6/hpf	3

3. Pus Cells

Sr. No.	Range	Grade
1	0-5/hpf	0
2	5-10/hpf	1
3	10-15/hpf	2
4	15-20/hpf	3

Investigation – Urine routine & microscopic test

OBSERVATION AND RESULT

Table No. 1: Effect of *ushira hima* on *sadaha mutrapravrutti*.

<i>Sadaha Mutrapravrutti</i>	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	1	0	-4.912 ^a	0.000	97.87	Significant

We have used Wilcoxon Signed Rank test to test the efficacy of *ushira hima*. From above table we can observe that P-Value is less than 0.05 hence we conclude that effect observed is significant.

Table No. 2: Effect of *ushira hima* on RBCs in urine microscopic test before and after study.

RBCs /hpf (Grade)	Before treatment	After treatment
0 (Absent)	18	26
1 (Occasional)	6	4
2 (1-3/hpf)	4	0
3 (3-6/hpf)	2	0
Total	30	30

RBCs	Median		Sum of rank (W)	Number of patients	P value	Result
	BT	AT				
	1	0	78	30	0.0017	Significant

On applying Wilcoxon sign ranked test P value is far less than 0.05. Hence, the effect of treatment is highly significant.

Table No. 3: Effect of *ushira hima* on Epithelial cells in urine microscopic test before and after study.

Epithelial cells /hpf (Grade)	Before treatment	After treatment
0 (Absent)	6	18
1 (Occasional)	4	10
2 (1-3/hpf)	13	2
3 (3-6/hpf)	7	0
Total	30	30

Epithelial cells	Median		Sum of rank (W)	Number of patients	P value	Result
	BT	AT				
	2	1	253	30	0.0011	Significant

On applying Wilcoxon sign ranked test P value is far less than 0.05. Hence, the effect of treatment is highly significant.

Table No. 4: Effect of *ushira hima* on Pus cells in urine microscopic test before and after study.

Pus cells /hpf (Grade)	Before treatment	After treatment
0 (0-5/hpf)	7	26
1 (5-10/hpf)	14	4
2 (10-15/hpf)	7	0
3 (15-20/hpf)	2	0
Total	30	30

Pus cells	Median		Sum of rank (W)	Number of patients	P value	Result
	BT	AT				
	1	0	276	30	0.0005	Significant

On applying Wilcoxon sign ranked test P value is far less than 0.05. Hence, the effect of treatment is highly significant.

DISCUSSION

Burning micturition is a very common symptom seen all over the world and often it is very irritating and painful. In modern days, we are always in a run towards success, money and goals, which forces us to compromise ourselves with our health. Other than UTI burning

micturition is due to our lack of self- maintenances. Burning micturition is one of the most common and distressing symptom among the group of urinary disorders.

It was observed at each follow up and found that there was significant reduction in burning micturition. Statistical value showed significant result at each follow up, out of 30 patients 29 (96.66%) patients got relief from burning micturition at the end of treatment. The effect of *Ushira Hima* on urine microscopic examination was analyzed before and after treatment with the help of Wilcoxon signed ranked test. The result was highly significant. RBCs were absent in 86.66% patients whereas occasionally present in 13.33% patients after treatment. This might be due to its superb cooling properties and anti-inflammatory properties. Epithelial cells were absent in 60% patients, occasionally present in 33.33% patients and 6.66% patients had only 1-3/hpf epithelial cells present in urine after treatment. This might be due to diuretic properties of *ushira*. In 86.66% patients had only 0-5/hpf pus cells present in urine after treatment.

The *Rasapanchaka* of *ushira* is *tikta, madhur rasa, sheet virya, katu vipaka* and *ruksha, laghu guna* as described in drug review. It is also mentioned under *Pittasansaman* gana by *Acharya Sushruta* and *Dahaprashana* gana by *Acharya Charaka*. So this drug is acts as *Pittasamaka, Dahaprashamana* and *Mutrala* due to its *sheet virya*.

CONCLUSION

In the present clinical trial, it was observed that overall effect of *ushira hima* in *sadaha mutra pravrutti* is 97.87%. So it can be concluded that *Ushir hima* is significantly effective in burning micturition. Also when urine microscopic examination of patients was done and after applying appropriate statistical tests of significance, it is found that there is marked relief in RBCs, pus cells count as well as epithelial cells with the use of *ushira hima*. Hence, we can concluded that *Ushir hima* is definitely effective on *sadaha mutrapravrutti* (Burning micturition in *grishma rutu*).

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