

CLINICAL EVALUATION OF SHILAJIT IN MUTRAKRICCHRA

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ABSTRACT

Mutrakricchra is a disorder of *Mutravaha Srotas*. All forms of urinary disorders where micturition is painful, comes under *Mutrakricchra*. It is a common medical problem of all age groups. Females are more prone to this disease. "Urinary tract infection (UTI)" have very much resemblance in clinical presentation to *Mutrakricchra*. The present study has been done on 30 patients of *Mutrakricchra*, under single group. Capsule *Shilajit* in the dose of 250 mg twice a daily along with milk was given for 30 days. The signs, symptoms scoring and blood/urine investigations were studied before and after treatment. The trial drug was found effective in *Mutrakricchra*. No adverse effect of the trial drug came into light during the course of trial.

KEYWORDS: *Mutrakricchra*, UTI, *Shilajit*, *Rasayana*.

INTRODUCTION

Mutrakricchra is a disorder of *Mutravaha Srotas*, which includes those forms of urinary disorders where *Kricchra* is the cardinal feature^[1] which resemblance to UTI's especially with lower urinary tract infections.^[2] *Rasayana*, being practiced effectively and extensively since ages, is a group of medicinal preparations which are immunostimulants and capable of preventing the causation of many ailments. Among various *Rasayana*, *Shilajit* holds an important place. According to *Charaka Samhita*, there is no curable disease on earth which *Shilajit* cannot perforce subdue.^[3] The clinical evaluation of *Shilajit* in *Mutrakricchra* is specially focused on Ayurvedic basis. Relevant observation of modern investigations like urine routine and microscopic was considered as supportive. Main aim of present study was to explore therapeutic efficacy of *Shilajit* in the patients of *Mutrakricchra*.

MATERIAL AND METHOD

Total 35 Clinically diagnosed patients of *Mutrakricchra* were screened between the age group of 16 to 70 years irrespective of sex, caste, and religion from Inpatient Department and Outpatient Department of Babe Ke Ayurvedic Hospital, Daudhar (Moga). Among them 30 patients successfully completed the clinical trial. Pregnant women, Pyelonephritis, Acute renal failure, Chronic kidney disease, Stage II hypertension, Acute

nephritic syndrome, Patients having symptoms of Haematuria, Nephrolithiasis, Rapid progressive glomerulonephritis, Sexually transmitted disease, patient suffering from BPH, Ca prostates and Psychosomatic patients were excluded from the study Blood investigations i.e. Hb, TLC, DLC, ESR, Urine Routine and Microscopic examination were carried out before and after treatment of each patient. All patients selected for trial were explained the nature of study and their written consent was obtained on the consent form attached with the proforma, before the commencement of the clinical trial.

Administration of drug: Capsule *Shilajit* in the dose of 250 mg twice a daily along with milk for 30 days. All the patients were advised to follow the *pathyapathya* of *Mutrakricchra*.

Criteria of assessment: All the patients registered for the current study were assessed on following parameters before and after the course of therapy to work out the efficacy of the treatment produced in the patients of both groups.

A: Subjective improvement: A specific rating scale for subjective parameters was utilized to assess the efficacy of the therapy. Changes found in signs and symptoms like *Sashoola* (painful micturition), *Sadaha* (burning micturition), *Abhikshna* (increased frequency) and *Alpa*

mutrapravrutti (Oliguria) related to *Mutrakricchra* were analyzed statistically.

B: Pathological and biochemical changes: The results were assessed based on the changes observed in biochemical and pathological parameters.

Criteria for overall assessment of therapy: The total effect of therapy was assessed considering overall improvement in signs and symptoms derived by following formula:

- Complete remission: 100% relief
- Marked improvement: >75% relief
- Moderate improvement: 50-75% relief
- Mild improvement: 25-50% relief
- Unchanged: less than 25% relief in the complaints

Statistical analysis: Mean, Percentage, SD, S.E. & t values were calculated. Unpaired t-test was used for calculating t-value. The total result including overall effect of therapy was presented in tables in both the groups.

Follow up: after 1 month.

OBSERVATION AND RESULT

Urinary tract infection remains fairly common condition affecting both sexes and all age groups. Maximum numbers of patients (46.6%) were in the age group of 31-40 years followed by 21-30 years (36.6%). Female predominance (86.66%) was noted. Sikh (67.6%) and rural population (96.15%) were more affected. Mostly married patients (83.3%) were found to be affected with UTI. Most of the patients in present study were primary educated. 46.6% were primary educated, 33.3% patients were of matric standard, 10% were uneducated and 10% were graduates. High incidence of *Mutrakricchra* in the less educated population can be attributed to their poor knowledge of personal hygiene. The lower and middle socio-economic group was seen to be more prone to this disease. Most of the patients (53.3%) with mixed dietary habits were recorded to be suffering from this disease. Most of the patients (53.3%) were of hard working life style. Sleep pattern of 30% of patients was found disturbed due to increased frequency of micturition. 23.33% of the registered patients had *Pitta vataja and Pitta Kaphaja Prakṛti* and majority of them had normal appetite (76.92%).

Table 1: Signs and Symptoms of *Mutrakricchra* observed in 30 patients.

Clinical features	No. of Patients	Percentage
<i>Saruja Mutrata</i>	22	73.33
<i>Sadaha Mutrata</i>	28	93.33
<i>Sparsasahya Mutrata</i>	18	60
<i>Mutrasanga-Binduvata Pravriti</i>	21	70
<i>Samkshobha MutraPravriti</i>	26	86.66
<i>Vegasahyatva Mutrata</i>	27	90
<i>Avila Mutrata</i>	12	40

Table 2: Effects of the therapy on clinical features in 30 patients of *Mutrakricchra*.

Clinical Features	Mean score		% age relief	S.D±	S.E±	T Value	P Value
	BT	AT					
<i>Saruja Mutrata</i>	3.3	0.5	84.84	1.23	0.38	0.38	<0.001
<i>Sadaha Mutrata</i>	4.1	1.1	73.17	1.05	0.33	9	<0.001
<i>Sparsasahya Mutrata</i>	1.6	0.6	62.5	0.67	0.67	0.67	<0.001
<i>Mutrasanga-Binduvata Pravriti</i>	1.9	0.6	52	1.16	1.16	1.16	<0.01
<i>Samksobha MutraPravriti</i>	2.5	0.8	68	1.06	1.06	1.06	<0.001
<i>Vegasahyatva Mutrata</i>	2.8	1.3	53.56	0.71	0.71	0.71	<0.001
<i>Avila Mutrata</i>	1.4	0.2	85.70	0.92	0.29	4.13	<0.01

Table 3: Effects of the therapy on urine microscopic findings in 30 patients.

Variables	Mean Score		%GE relief	S.D±	S.E±	t Value	P Value
	BT	AT					
Pus cells	1.46	0.38	73.68	0.39	0.07	14.00	<0.001
RBC'S	1.60	0.40	75.00	0.45	0.20	6.00	<0.01

Effects on hematological findings:- Though, all the patients were subjected to haematological investigations, ESR came down by 31.63% and TLC came down by 10.26% which shows relief in infection.

Table 4: Overall effects of the therapy.

Results	No. of patients	Percentage
Cured	14	46.66%
Markedly improved	8	26.66%
Mildly improved	6	20%
Unchanged	2	6.66%

DISCUSSION

Mutrakricchra is one of the common diseases of *Mutravaha Srotas*. It has been mentioned under the *Mutra-apravriti janya* disorder, in which there is predominance of *kricchrta* i.e. the painful voiding of urine which is the cardinal feature of this disease. *Shilajit* possess all the properties of *rasa, uprasa, parada, ratna* and *lauha* together in itself.^[4] In *Rastaringini & Yogratnakar*, it is described in urinary disorders like *Ashmari* (Calculus), *Mutrakricchra* (UTI).^[5,6] *Shilajit* is described as one which removes *Kapha*, dries up fat and alleviates calculus, gravels, dysuria and *Gulma* (abdominal distension). Its use is also described for other diseases like *Kushtha* (leprosy), *Apasmara* (epilepsy), *Unmada* (mental disorders), *Shlipada* (filariasis), *Shosa* (cachexia), *Gulma, Vishama Jvara* (malaria) and stones.^[7] *Shilajit* also contains minerals such as iron, aluminium, magnesium, potassium, calcium, chlorides, sulphate etc. Potassium salts are used as diuretics. Relief in these symptoms may be due to effect of the trial drugs which exhibit anti bacterial, anti inflammatory, anti septic, analgesic and above all diuretic properties. The increased incidence of dysuria in second and third decades of life may be due to increased sexual activity and unhygienic conditions. Majority of the patient i.e. 86.6% belonged to female sex and 13.3% are male. There is peculiarity of female uro-genital anatomy i.e. urethra is short and proximal to anus.

CONCLUSION

In the present clinical study, out of 35 patients; 30 completed the trial. The effects of the trial drug *Shilajit* in recommended dose is evaluated over them. The overall results of the therapy were encouraging as out of 30 patients, 46.68% patients were cured, 26.68% patients were markedly improved and 20% patients were mildly improved. Therefore, it can be concluded that the trial drug was effective in *Mutrakricchra*.

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