

**A STUDY ON PITTAJA MUTRAKRICHRA – UTI W.S.E. ON CYSTITIS & ITS MANAGEMENT THROUGH AYURVEDIC ANUBHUTA YOGA”- A CLINICAL STUDY
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ABSTRACT

The disease Pittaja Mutrakricchra is well acknowledged in classical texts of Ayurveda¹, with different treatment modalities, which can be concurrent to urinary tract infection on theoretical and clinical symptomatology of diseases. It is regarded as dukkhena or kricchrena mutrapravrutti i.e. painful micturation or emission of urine with difficulty or dysuria. Urinary tract infections are second most widespread type of infectivity in the body secretarial for about 8.1 million visits to health concern provider every year². UTI commonly encounters with *Escherichia coli* accounts for about 85% of community acquired. The Methodology used for this study is the clinical study. The objectives of the research were to on Mutravahasrotodusti - Urinary Tract Infections with special emphasis on Cystitis & its management through Ayurvedic Anubhuta Yoga. Discussion made on the UTI-Mutravahasrotodushti, Cystitis-Pittaja mutrakrichra and its management with Ayurvedic Anubhuta Yoga. Conclusion drawn on clinically observed research work.

KEYWORDS: Pittaja Mutrakricchra , Ayurvedic Anubhuta Yoga, UTI, Cystitis.

INTRODUCTION:

Ayurveda considers that shareera is made from three fundamental components i.e Dosha, Dhatu and Mala. These three elements are responsible

for maintenance of whole body in healthy status. It means they help in maintaining the structural and functional integrity of the body³.

Among these three Constituents of our body Mala's are specially meant for elimination of waste products out of the body. When there is any impairment or disturbance in their normal function or impairment in kledavahana⁴ by mutra due to its vitiation by vitiated doshas, they in turn vitiate their marga or srotas which is called as mutravahasrotodusti. Pittaja Mutrakricchra is subject complaining the shoolayukta, raktayukta, dahayukta, and muhurmuhura mutrapravritti etc. In present era Pittaja Mutrakricchra is common feature. It can be concurrent to Cystitis (UTI) where dysuria, burning micturation and increased frequency of urination etc are most regular complaint. Urinary tract infections are the most commonly found bacterial infections, accounting for nearly seven million OPD visits and one million emergency department visits, resulting in 100,000 hospitalizations of women, the elderly, and also diabetic patients all over world per year⁵. Women (47.9%) have a significantly higher prevalence of UTI than men (34.1%).¹ The research

work done on Mutravahasrotodusti - Urinary Tract Infections with special emphasis on Cystitis & its management through Ayurvedic Anubhuta Yoga.

The overall study showed both clinical and statistical significance following the medication for a span 21 days.

MATERIALS AND METHODS:

In this study, A total 30 patients with age group between 20 to 50 years were selected randomly from OPD as per randomization chart and were made single group. They were given Kashaya of Ayurvedic Anubhuta Yoga (Contains- Punarnava, Gokshura, Varuna, Kulattha, C hopachinni, Tanka, Yavakshara, Navasadar & Trinapanchamoolas) & they are asked to take 15ml thrice daily with sukoshna jala as anupana.

- Pathya Ahara and Vihara were advised to the Subjects
- Duration: 21 days
- Follow up: Once in a week for 3 weeks.

REVIEW OF PITTAJA MUTRAKRICHRA- UTI –CYSTITIS: PITTAJA MUTRAKRUCCHRA⁶:

The Chikitsa of Pittaja Mutrakrucchra can be divided into Shodhana and Shamana Chikitsa. The Shodhana therapy can be further divided into Antahparimarjana and Bahiparimarjana therapy which is as follows:

SHODHANA: Uttarabasti with Trunadi grita

(a)Bahiparimarjana Chikitsa: -Parisheka, Avagahana in cold water, sheeta pradeha, greeshma vidhi.

(b)Antahparimarjana Chikitsa: - Paya, Virechana with grita prepared of draksha, vidaari and ikshu. Niruha basti & Anuvasana basti

SHAMANA:-

- Cold kwatha of Shatavari, kasha, kusha, swadamstra, vidaari, shali, ikshu and kasheruka mixed with madhu and sharkara alleviated pittaja mutrakrucchra.
- Kwatha of kamala, utpala, or sringataka or vidaari or dandairaka mula with madhu & sharkara.
- Peya of Ervarukabeeja, Trapusa, kusumbha with kumkuma and vasa along with

draksha rasa.

- Maha Chandrakala rasa. Almost all authors have suggested Truna panchamula, Gokshura, ervarubija. Etc.

URINARY TRACT INFECTION

Urinary Tract Infection (UTI) is defined as multiplication of organism in urinary tract. Upper urinary tract infection is infection involving the kidney and lower urinary tract infection is infection involving the bladder, prostate, and urethra.

Urinary tract infections are the most commonly found bacterial infections. Considering different factors.UTI is classified based on Site of Infection:-

1) Upper UTI

2) Lower UTI

Upper UTI includes infection to kidneys and prostate producing pyelonephritis, prostatitis, intrarenal and perinephric abscesses. Lower UTI includes infection of bladder (cystitis) and urethra (urethritis). Lower UTI (urethritis and cystitis) are often considered superficial (or mucosal) infections and are common in young female patients

CYSTITIS⁷

Cystitis is a fairly common lower urinary tract infection. Cystitis is an infection of the bladder wall that can lead to ongoing discomfort. Cystitis usually occurs when the urethra and bladder, which are normally sterile, or microbe free, become infected with bacteria. Patients with cystitis usually report dysuria, frequency, urgency, and Suprapubic pain. The urine often becomes grossly cloudy and malodorous and is bloody in ~30% of cases. White cells and bacteria can be detected by examination of urine in most cases. In cystitis, only 10²–10⁴ bacteria per milliliter of urine can be detected, and at some instances bacteria cannot be seen in a Gram-stained preparation of urine. Physical examination generally reveals only tenderness of the urethra or the Suprapubic area.

SYMPTOMS

Clinical Symptoms include

- Dysuria (includes Pain, Burning and Strangury)
- Frequency
- Urgency

- Suprapubic pain.

TREATMENT

Painkillers, such as acetaminophen (Tylenol) or ibuprofen, may relieve discomfort.

Antibiotics commonly used for bacterial cystitis are nitrofurantoin, trimethoprim-sulfamethoxazole, amoxicillin, cephalosporins, ciprofloxacin, and levofloxacin.

PREVENTION

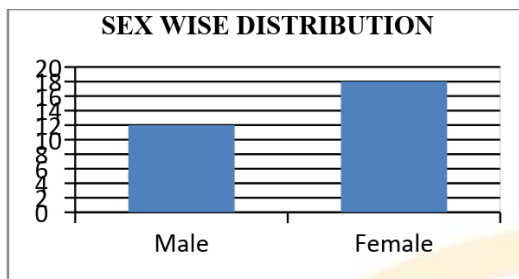
- Cystitis is often not preventable, but the following measures may help:
- Emptying the bladder completely when urinating
- Not postponing urination
- Practicing good hygiene after sex
- Using neutral, unperfumed soaps around the genitals
- Avoiding tight cloths.

OBSERVATIONS:

In this present study, 30 subjects suffering from cystitis (Pittaja mutrakruchra) were registered fulfilling the criteria and their observations are showed below.

1) SHOWING SEX WISE DISTRIBUTION

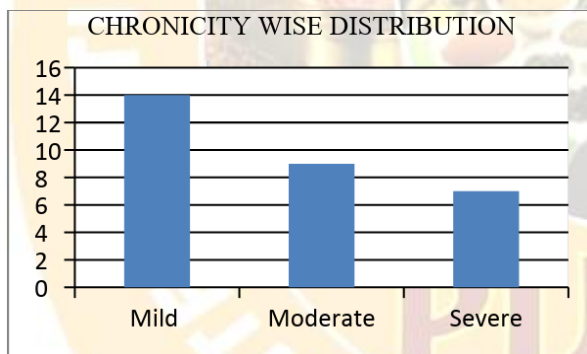
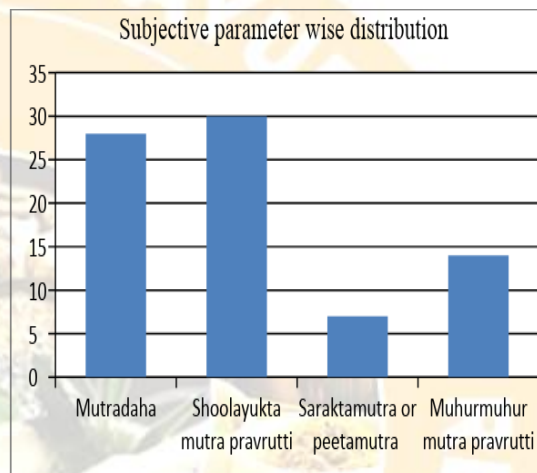
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orpeetamutra		%
Muhurmuhurmutrapra vrutti	14	46.66 %

2) SHOWING CHRONICITY WISE DISTRIBUTION

CHRONICITY	SUBJECTS	%
Mild	14	47%
Moderate	09	30%
Severe	07	23%



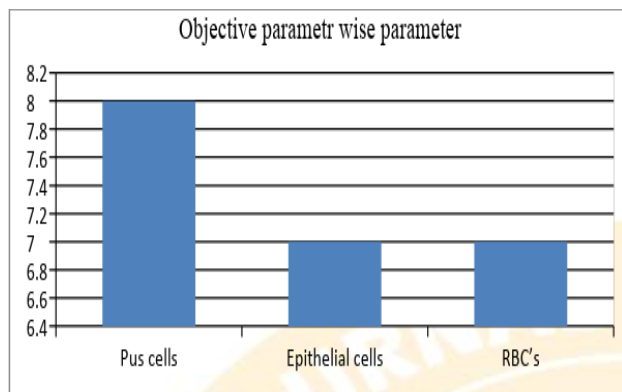
4) SHOWING OBJECTIVE PARAMETER WISE DISTRIBUTION

3) SHOWING SUBJECTIVE PARAMETER WISE DISTRIBUTION

SUBJECTIVEPARAMETERS	SUBJECTS	%
Mutradaha	28	93.33 %
Shoolayuktamutra pravrutti	30	100 %
Saraktamutra	07	23.33

URINE ROUTINE	SUBJECTS	%
Albumin	00	00%
Sugar	00	00%
Protiens	00	00%
Pus cells	08	26.66 %
Epithelial cells	07	23.33%
RBC's	07	23.33%
Crystals	00	00%

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5) EFFECT OF THERAPY ON SHOOLAYUKTA MUTRA PRAVRUTTI-

No.of Patients	Mean		Mean difference	% relief of	S.D.	S.E.	t	P	Remarks
	BT	AT							
30	1.96	0.86	1.1	55.93%	0.60	0.10	9.91	<0.001	Highly Significant.

6) EFFECT OF THERAPY ON MUTRADAHA-

No.of Patients	Mean		Mean difference	% relief of	S.D.	S.E.	t	P	Remarks
	BT	AT							
30	2.13	0.06	2.07	96.87%	1.014	0.18	11.15	<0.001	Highly Significant.

7) EFFECT OF THERAPY ON MUHURMUHUR MUTRAPRAVRUTTI-

No.of Patients	Mean		Mean difference	% relief of	S.D.	S.E.	t	P	Remarks
	BT	AT							
30	0.8	0	0.8	100%	1.063	0.19	4.12	<0.001	Highly Significant.

8) EFFECT OF THERAPY ON SARAKTA MUTRAPRAVRUTTI-

No.of Patients	Mean		Mean difference	% of relief	S.D.	S.E.	t	P	Remarks
	BT	AT							
30	0.33	0.1	0.23	70%	0.43	0.07	2.97	>0.10	Insignificant.

9) EFFECT OF THERAPY ON PUS CELLS-

No.of Patients	Mean		Mean difference	% of relief	S.D.	S.E.	t	P	Remarks
	BT	AT							
30	0.26	0	0.26	100%	0.44	0.08	3.24	<0.01	Significant.

10) EFFECT OF THERAPY ON EPITHELIAL CELLS-

No.of Patients	Mean		Mean difference	% of relief	S.D.	S.E.	t	P	Remarks
	BT	AT							
30	0.2	0	0.2	100%	0.43	0.07	2.97	<0.01	Significant.

11) EFFECT OF THERAPY ON RBC'S-

No.of Patients	Mean		Mean difference	% of relief	S.D.	S.E.	t	P	Remarks
	BT	AT							
30	0.26	0.03	0.23	87.5%	0.43	0.07	2.97	>0.10	Insignificant.

RESULT:

1.SHOOLAYUKTA

MUTRAPRAVRUTTI :

Shoolayuktamutrapravrutti before treatment was 1.96 which was reduced to 0.86 after the treatment with 55.93% relief .

2.MUTRADAHA:

The mean effect for mutradaha before treatment was 2.13 which was reduced to 0.06 after the treatment with 96.87% relief. This is probably due to the drugs in Anubhuta yoga are Mutrala and Kshariya drugs which increases the amount of urine and decreases the concentration of urine

3.

MUHURMUHURMUTRAPRAVRUTTI :

The mean effect for muhurmuhurmutrapravrutti before treatment was 0.8 which was reduced to 0 after the treatment with 100% relief. This could attributed to the localised sotha developed in the bastipradesha which gets reduced by the mootraladravyas like punarnava and shoolahaaradravyas.

4. SARAKTAMUTRAPRAVRUTTI :

In the present study, the overall relief was 70% this may be attributed to the action of shonitaskanadana drugs present in the Anubhuta yoga which has kashaya rasa dravya. But the result is statistically Insignificant when applied to the population because the sample size was too less to derive to the conclusions.

5. PUS CELLS:

They were observed in 100% patients before treatment as it is considered in inclusion criteria. The mean effect for pus cell before treatment was 0.26 which was reduced to 0 after the treatment with 100% relief.

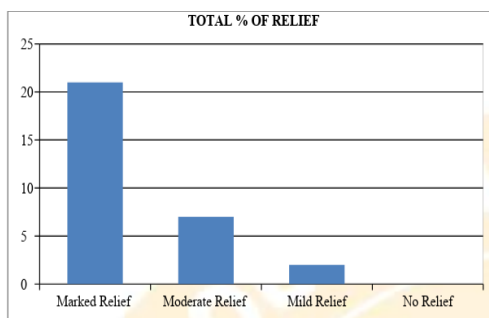
6. EPITHELIAL CELLS:

Urine epithelial cells were observed in 20% patients before treatment and nil after treatment. The mean effect for Epithelial cell before treatment was 0.2 which was reduced to 0 after the treatment with 100% relief.

7. RBC'S:

On the totality based on the subjective and objective criteria the improvement of the patient was found

to be 83.17% which is significant enough.



DISCUSSION:

- 1. AGE:** 18 (60.00%) subjects were between 41-50 years, 07 (23.33%) subjects were between 31-40 years and 05 (16.67%) subjects were between 21-30 years of age group. The prevalence of UTI is more in age group between 41-50yrs.
- 2. SEX:** 18 (60.00%) subjects registered were female and 12(40.00%) subjects registered were Male. Shortness of the lower urinary tract could be attributed as the cause of increased prevalence in female.
- 3. NATURE OF WORK:** In this present study, 12 (40%) subjects were doing mild work, 07 subjects (23.33%) were doing Moderate work, 11 subjects (36.67 %) were doing laborious work. The probability of limited knowledge of

healthy life style is also likely along with lack of self attention.

- 4. CHRONICITY:** In this present study, 14 (47%) subjects were with Mild, 09 (30%) subjects were with Moderate and 07 (23%) with Severe type of Chronicity of the disease. it shows the slow progress of the disease in time.

- 5. SUBJECTIVE PARAMETER :** In this present study, among 30 subjects, 28(93.33%) subjects were having mutradaha, 30 (100%) subjects were having Shoolayukta mutra pravrutti, 07(23.33%) subjects were having Saraktayukta mutra pravrutti and 14 (46.66%) subjects were having muhurmutra pravrutti. The physical changes in urine color as peetata and raktavarna are the signs of cystitis. The stangaury and weak stream of urine almost always is a presentation in cystitis.

- 6. OBJECTIVE PARAMETER:** In this present study, among 30 subjects, 08(26.66%) subjects were having pus cells, 07(23.33%) subjects were having epithelial cells, 07(23.33%) subjects were having RBC's. the prevalence of

pus cells in urine is an indication of an infective manifestation.

CONCLUSION:

- Pittaja mutrakrucchra when viewed under the lens of conventional medicine can be correlated with Cystitis (UTI) as both diseases symptoms are similar.
- The incidence rate of Pittaja Mutrakrucchra (Cystitis) is 80%, more prevalent in middle aged, in females and in marital status.
- It is found that Pittaja Mutrakrucchra is more prevalent amongst Krura Kosthi, Vishmagni and Vata Pittaja prakriti person.
- Based on the clinical research work it is interpreted in the form of tara-tama bhava of symptoms as Krucchrata Pradhana, Daha Pradhana, Peetavarna Mutra Pradhana and Raktavarna Mutra Pradhana.
- The Ayurvedic Anubhuta Yoga acts as Mootrala, Shothahara, Dahahara, Mutravirajaniya, Vatanulomana, Lekhana, Mootrajanana, Rasayana, krimighna, Ashmarinashaka, Mutravishodini.

- It is observed that out of 30 subjects, 21 subjects showed Marked Relief (Highly significant), 07 subjects showed Moderate Relief (Significant), 02 subjects showed Mild Relief.
- Based on the analysis of the clinical research work this Ayurvedic Anubhuta Yoga is confidently practiced at OPD bases.

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