

AYURVEDIC MANAGEMENT OF INTERSTITIAL CYSTITIS (W.S.R. MUTRAKRICCHA) – A SINGLE CASE STUDY

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ABSTRACT

Introduction: Urinary Bladder diseases affect Patient's quality of life, can produce discomfort, inconvenience, sometimes serious complications e.g., Neurogenic bladder, Calculi, CA. One of them is Interstitial cystitis. A chronic disease that appears to affect urinary bladder with symptoms i.e., discomfort, pain or pressure. It is characterized by chronic inflammation and lower urinary tract symptoms. No certain infection or any other clearly cause have been identified. If left untreated and without spontaneous resolution, the bladder may undergo more fibrosis, further reducing bladder volume and further compounding symptoms experienced. **Patient Information:** A 54-year female patient came to O.P.D. No-5 (Department of Panchkarma) of Government Akhandanand Ayurved College and Hospital, with the complaint of increased frequency with painful micturition along with burning sensation, constipation, pain during coitus for 6 months. Patient has past history recurrent Urinary Tract Infection and Chronic Constipation (since 20 years). She took

Modern contemporary medicine and surgical intervention for long time with temporary relief.

Therapeutic Information: Depending upon sign and symptoms patient was treated as *Mutrakruccha* (~dysuria). *Apyidaka Snehapana* (~a special mode of lipid administration)) along with *Shaman Chikitsa* (~palliative therapy) were given. **Result:** Within 6 months of treatment, all the symptoms were subsided, USG report normal. **Conclusion:** An attempt has

been made here to discuss effect of Ayurveda management to break pathogenesis of the disease and producing excellent results in the article.

KEYWORDS: Interstitial Cystitis, *Mutrakruccha*, *Basti*, *Avpidaka Snehapana*, *Shaman Chikitsa*.

INTRODUCTION

Renal system comprises of Kidney, Ureters, Urinary Bladder and Urethra. Function of kidney is to excrete metabolic waste product and foreign chemicals, regulation of water and electrolyte imbalance, regulation of arterial pressure, regulation of erythrocyte production, secretion, metabolism and excretion of hormone, gluconeogenesis and urine formation.^[1] Ureters connects the kidney to bladder, carries urine from kidney to the bladder. Urinary bladder is a hollow muscular organ that stores urine. Common disorder of urinary tract is UTI, Renal stone, chronic kidney disease, glomerulonephritis, urinary incontinence, BPH, CA of bladder and kidney and Interstitial cystitis, one of the urinary bladder diseases.

Interstitial cystitis is a chronic condition characterized by pain perceived to be from urinary bladder, urinary urgency, frequency and nocturia, painful coitus. The spectrum of symptoms intensity is broad. Excruciating pain, distressing urgency, frequency i.e., up to 60 times/24, hours and nocturia can cause sleep deprivation. Prevalence of the disease is 3-6% among women and 2-4% among men. In less than 10% of Interstitial Cystitis /Bladder Pain Syndrome who has Hunner's lesion or most of these patients have substantive inflammation, mast cells and granulation tissue. In 90% of the patient, it occurs without such lesions, the bladder mucosa and interstitial are relatively normal with scant inflammation. Increased permeability of bladder mucosa due to defective epithelium or glycosaminoglycans (the bladder mucosa coating).^[2] Conventional line of treatment includes conservation therapies like NSAIDS, Pentosan sulphate, a semi synthetic polysaccharide, Cystoscopy fulguration solution containing lidocaine, hyaluronic acid or dimethyl sulfoxide instilled in bladder or botulinum toxin injected on bladder wall but all this treatment provides temporary relief and also possess side effects like bladder irritation, gastric ulcers, kidney damage with long term use, eye damage and liver function disturbances.^[3]

Depending upon signs and symptoms this condition can be correlated with *Mutrakruccha*(~dysuria). *Aacharya Charak* has described 8 types of *Mutrakruccha*(~dysuria) i.e., *Vataj*, *Pittaj*, *Kaphaj*, *Sannipataj*, *Ashmarij*, *Sukraj*, *Shukravarodhjanya*, *Raktaj*. In

ayurvedic science it may come under the category of *Vata Pittaj Mutrakruccha*(~dysuria). Symptoms present are *Tivra Ruja* in *Vankshan*(~groin), *Basti* (~urinary bladder), *Medhra*(~penis), *Swalpa Avum Muhurmhur Mutra Pravrutti*(~frequent micturition with less quantity) and *Sadaha Mutra Pravrutti* (~burning micturition).^[4] The disease can be included under *Mutravahastroto Vikar* (~urinary tract disorders). *Basti* (~urinary bladder) and *Vankshana* (~groin)^[5] are *Moola-Sthan* of *Mutravaha Strotas* (~urinary tract). *Mutravaha Strotodushti*(~deformity in urinary tract) *Hetu*(~cause) are *Mutra Vega dharan*(~suppression of urge for micturition), *Sevan* of *Udak*(~consumption of water), *Bhakshya*(~food), *Stree* (~sexual intercourse) after having urge for micturition, *Kshata*(~injury) and *Ksheen* (~dematiated).^[6] *Mutravaha Strotodushti lakshana*(~symptoms of urinary tract deformity) are *Atishrushta*(~excessive urination), *Atibaddha*(~restriction in urination), *Prakupita*(~hampered urination), *Alpalpa*(~scanty), *Abhikshana*(~excessive), *Sashoola Mutrapravrutti* (~painful micturition).^[7] Due to *Sevan* of *Mutravaha Strotodushti Nidan*(~causative factors which vitiates urinary tract), *Prakupita Vata*(~derranged vata) along with *Pitta* causes *Kshobha* (~irritation) in *Basti*(~urinary bladder) resulting in *Mutrakriccha*(~dysuria).^[8] Ayurvedic management of the same includes *Nidan Parivarjan*, *Avpidak Snehpan*^[9] (~a special mode of lipid administration), *Shaman Aushadhi*(~medicine), *Basti*(~medicated enema). This line of treatment reduces the symptoms and recurrence by correcting the bladder pathology.

CASE REPORT

A 54-year female patient came At OPD no. 5 with chief complaints of *Muhur- Muhur Mutra Pravrutti* (~frequent micturition), *Sadaha Mutra Pravrutti* (~burning micturition), *Krute Apiakrut Sajna* (~even after doing feeling as if not done), Painful coitus All *lakshana*(~symptoms) were present For 6 Months *Saruja Mutra Pravrutti* (~painful micturition) *Savibandh Mala Pravrutti*(~constipation), these complaints since 20 years.

History of present illness: The patient was apparently healthy before 6 Month. Gradually she developed *Muhurmhur Mutra Pravrutti* (~frequent micturition), *Saruja Sadaha*(~painful and burning micturition), and *Kruchra Mutra Pravrutti* (~obstructed micturition) associated with *Savibandh Mala Pravrutti*(~constipation) (for 20 years). For this she took allopathy medicine Radidif cap, Clotrimazole ds, Pyrudium tablet and For-ic tablet for 6 months, with no significant relief. Further She had undergone **surgical treatment of Cystoscopy and Cysto-dilation under General Anaesthesia** with which she got temporary relief for 15 days

but again symptoms recurred. Almost daily Patient was taking painkiller orally and injection if pain goes unbearable(weekly). After 2 months of surgical intervention, she came to Government Akhandanand Ayurvedic Hospital OPD no. 5 for further treatment. **Surgical history** – Patient has undergone Cystoscopy and Cystodilation under general anaesthesia for the same complain on 10/10/2023. Hysterectomy done before 12 years. Patient is K/C/O Hypertension since 10 Years. **Specific Hetu-** *Nitya Mutra-Vega Vidharan* (~suppression of urge for micturition).

General and Systemic examination

On general examination, the patient was well-built with a weight of 72 kg and height of 180 cm. Vital parameters were within normal limits (Blood Pressure – 114/70 mmHg, Pulse – 75/min). Systemic examination revealed no abnormalities in the Respiratory, Cardiovascular, and Nervous systems. On abdominal examination, no pain or tenderness was elicited in the abdomen or pelvic region.

Table 1 shows Ashtvidha Pariksha.

SAMPRAPTI GHATAK (~pathological factors)

Samprapti (~ Pathology) - The predominant *Doshas* (~regulatory functional factors of the body) involved are *Vata* and *Pitta*. The affected *Dushyas* (~which gets vitiated) are *Rasa* (~), *Rakta* (~blood), and **Mamsa** (~muscle tissue), **Meda** (~adipose tissue), **Mutra**(~urine), **Purisha**(~feces), with involvement of **Mutra**(~urine), **Purisha**(~feces). The impacted *Srotas* (~structural or functional channels) are *Rasavaha* (~channels carrying nutrient fluids), *Raktavaha* (~channels carrying blood tissue), *Mamsavaha* (~channels carrying muscle tissue), *Medavaha* (~channels carrying fat), *Mutravaha* (~channels carrying urine), and *Purishavaha* (~channels carrying feces). There is impairment in *Agni* (~digestive/metabolic factors), specifically *Jatharagni* (~metabolic factors located in digestive tract) as well as the. The *Sroto Dushti* (~deformity in the body channels) is characterized by *Vimargagamana* (~diversion to the flow of the contents to the improper channels) and *Sang* (~obstruction). *Udbhava Sthana* (~site of origin) is the *Pakwashaya* (~intestine), *Vyakta Sthana* (~manifesting site) is the *Basti* (~urinary bladder). *Roga Marga* (~disease pathway) is *Abhyantara* (~internal) and *Swabhav* (~Nature) is *Chirkari* (Chronic). On the basis of above pathological factors patient was diagnosed *Mutrakriccha* [Interstitial Cystitis].

APATHY: *Apathya* Includes *Veg Dharan* (~ suppression of urges), *Shuska Ruksha* (~dryness properties) *Pistaan Sevan*, *Vyayam*(~exercise), *Vyavay* (~sexual intercourse), *Kharjur*(~dates), *Shalook*, *Kapittha*, *Jambu*, *Bis*, *Kashay Ras Sevan* (~astringent taste).^[10]

Treatment given: Depending upon *Samprapti Ghatak* (~pathological factors) *Vata-Vaigunya* (~disruption of vata), *Shoola pradhanta* (~pain dominance), *Punarnavadi Ksheer Basti* (~one type of enema) with alternate *Matra Basti* (~one type of enema) was planned.

Contents of *Ksheer-Basti* Includes *Madhu*, *Saindhav*, *Goghrita*, *Putiyavani Kalka*, *Punarnavadi Ksheerpak*. *Anuvasan* was given with *Mahanarayan Taila*.

Table No. 2: Bast i Krama Planned

After aggravation of the symptoms, patient took allopathy antispasmodic and painkiller medicine in Injectable form for some days and stopped Ayurvedic medicine. But as the effect of modern medicine subsided, patient came to OPD on 21st march and afterwards *Shaman Chikitsa* (~palliative therapy) was started as mentioned below,

Table no. 3: Shaman Chikitsa

Time line and Therapeutic Intervention are given in Table No.3.

Table No 4 OUTCOME AND FOLLOW UP:^[11] After the treatment, the clinical signs and symptoms are assessed as given in Table no. 4.

INVESTIGATION & RESULT: USG of abdomen and pelvis of before and after treatment are given in Figure 1 and figure 2.

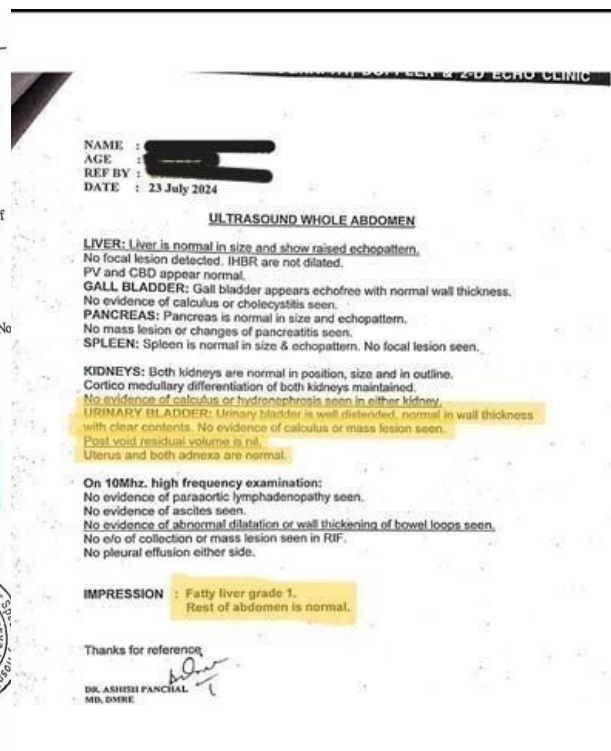
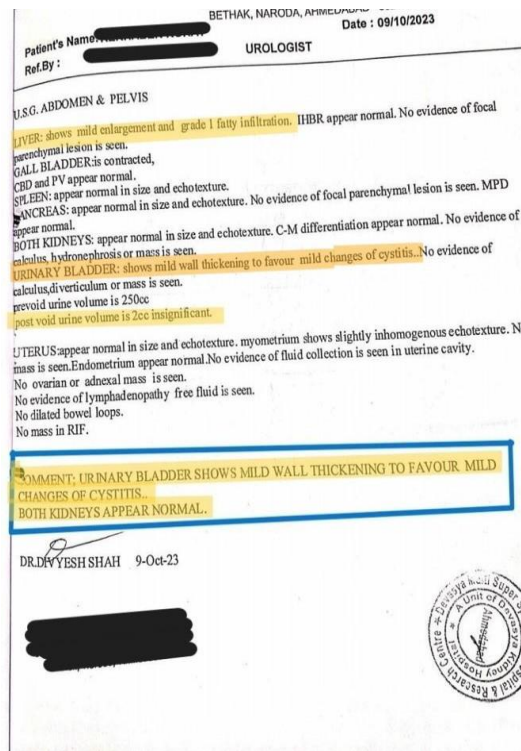


Table 1: Ashtvidha Pariksha.

Nadi	82/min
Mutra	30 times /day, 6-7 times / night with severe pain and burning. (1500 ml per day with some froth. Quantity of the urine vary each time from 5 ml to 100 ml.) Color- Yellowish White, Odour- Not specific.
Mala	1time /day unsatisfactory bowel movement, <i>Savibandh</i>
Jihva	<i>Niram</i>
Shabda	<i>Prakrut</i>
Sparsha	<i>Prakrut</i>
Dhruk	<i>Prakrut</i>
Aakruti	<i>Madhyam</i>

Table 2: Planned Basti Karma.

Date	Dose	Lakshana
01/03/2024	Anuvasan basti with mahanarayn tail 60 ml	Samyaka Basti Pratyagaman Lakshana
02/03/2024	Ksheer basti	Samyak Niruh Pratyagaman Lakshana
03/03/2024	Anuvasan basti	Samyaka Basti Pratyagaman Lakshana
04/03/2024	Ksheer basti	Kwachit Shool at Guda Marg during Basti Pratyagaman
05/03/2024	Anuvasan basti	Kwachit Shool at Mutra Marg during Basti Pratyagaman
06/03/2024	Ksheer basti	Tivra Shoola at Guda Marga during Basti Pratuyagaman

Table 3: Shaman Chikitsa.

Date	Treatment given	Dose and Duration	Anupana
21/03/2024 To 03/04/2024	1. Avapidak Snehpan	40 ml <i>Kshudha Kale</i> And 40 ml after digestion of food.	<i>Ushnodaka</i>
	2. Chandrakala Rasa	2 tablet twice a day	All this tablet are triturated together and administered orally with <i>Ushnodak</i> before food (<i>Apan Kal</i>)
	3. Mamejava Ghanvati	1tablet thrice a day	
	4. Trivanga Bhasma	1 tablet(125mg) Od	
	5. Rasayan Choorna	3 gm thrice a day	
04/04/2024 To 05/07/2024	Same as above medicine		

Table 4: Outcome and follow up.

Lakshana	1/03/24	21/03/24	4/04/24	18/04/24	02/05/24	16/05/24 19/07/2024)	05/07/24
Muhur Muhur Mutra Pravrutti	3	3	2	1	1	1	0
Mutrakrucchata	3	3	2	2	1	1	0
Mutradaha	4	4	2	1	1	1	0
Sashoola Mutra Pravrutti	4	4	3	2	1	1	1
Kruteapi Akrot Sangna	3	3	3	2	2	1	1

DISCUSSION

Initially, the patient was treated with *Punarnavadi Ksheer Basti* (~medicated enema). As per the *Samprapti Ghatak* (~pathological factors), Vitiated *Vata dosha* (~deranged *vata*) along with *Kapha*, get lodged in the *Basti* (~urinary bladder), producing acute *Lakashana* (~symptoms). In this case, *Punarnavadi Ksheera Basti Karma* (~ one type of medicated enema) was selected considering *Vata, Pitta, Mutra-Kleda*. But after administration of *Basti* on 4th day of *Ksheer- Basti* symptoms got aggravated and patient had acute unbearable pain in *Guda Marga* (~anal region). Symptoms were again observed on 6th day. It seems to have occurred due to contraction of pelvic floor muscles as patient was having pelvic floor dysfunction. Then *Basti* was stopped and patient was started *Shaman Aushadhi* (~palliative therapy). In *Shaman Aushadhi*, *Avapdeedak Snehpana* (~a specific mode of lipid administration), *Trivanga Bhasma* (~tablet of *trivang bhasma*), *Chandrakala Rasa* (~tablet of *Chandrakala*), *Mamejava Ghanvati* (~tablet of *mamejava*), *Rasayan Choorna* (~powder of *Rasayan*). *Avapdeedak Snehpana*^[12] (~a specific mode of lipid administration) It is indicated in *Mutravegarodhajanya Vikara* (~disease produce due to suppression of micturition) by *Aacharya Charak*. Method of administration of *Avpeedak Snehpan* (~a specific mode of lipid

administration) is administered in 2 kala(~period) at a stretch, that is, *pragbhakta* (~before food) and *Jeernanta avastha* (~after the digestion of food). Ghrita *Siddha* with *Vata Pittahar Dravya* like *Shatavari*, *Ashwagandha*, *Erandmul*, *Guduchi* was given in *Avapdeedak form*. Ghrita is *Vatapittahar*, *Sanskarasya Anuvartanat*(~ it takes Herb's Properties into it, without leaving its own inherent properties). enhances its potency. This *Sneha* is found to be helpful in treating *Mutrakriccha*. Probable mode of action might be-Due to ketogenesis it'll increase the frequency of micturition)^[13], Due to its Guna(~properties) we can say that it will helps in re-establishment of GAGs (glycosaminoglycans) which acts as protective layer in bladder and thereby help in reduction of symptoms, It will provide relaxation to pelvic floor muscles by its *Mardav Guna* of *Sneha* and also helps in correction and *Anuloman* of *Apan Vata* Thereby it helps in reduction of symptoms of *Mutrakruccha* i.e., *Sadah* and *Sashoola Mutrakruccha*^[14], *Chandrakala Rasa*^[15]- The ingredients are *Parad*, *Gandhak*, *Tamra*, *Abhraka*, *Vastnabh*, *Karpura*, *Gairik*, *Muktashukti* etc. *Rasa Panchak* of *Chandrakala* is *Tikta* (~bitter taste) *Madhura Rasa* (~sweet taste), *Sheeta Virya* (~cold potency), *Madhur Vipak* (~sweet biotransformed rasa). *Main action of Chandrakala Rasa* is on *Pitta Dosha* and *Apana Vayu*. It reduces *Ushnata* (~feeling of warmth) and *Tikshanata* (~sharpness) of *Pitta*. It is indicated in *Mutrakriccha* (~dysuria) also it will help in *Anulomana* (~mild purgative action) of *Apan Vayu*. This drug mainly expels out vitiated *Pitta*, *Mutra* etc. giving stat relief in burning sensation and pain, reduces Inflammation of Urinary Bladder. *Trivanga Bhasma*^[16]- *Rasa-Aushdhi* are the fast-acting medicines required in lower dose, increase potency of accompanied herbal drugs. It consists of *Naga*, *Vanga* and *Yashad Bhasma*. It acts on *Vata* and *Vata Sanshrushta Pitta Dosha* and works in *Rakta*, *Mamsa*, *Asthi*, and *Shukra Dhatu*. It helps in *Anulomana*(~mild purgative action) of *Apan Vata*, strengthens Muscles of pelvic floor, reduces inflammation inside urinary bladder. It breakdowns pathogenesis of the disease, reducing symptoms. *Mamejava Ghanvati*^[17] – it contains *Mamejak*, *Pippali*, *Ativisha*, *Katuki*. It is *Tikta* (~bitter taste) *Katu Rasa* (~pungent taste), *Sheeta Virya* (~cold potency), *Katu Vipak*(~pungent biotransformed rasa). and *Laghu* (~lightness properties) *Ruksha Guna* (~dryness properties). Though given in *Prameha* *adhikar*, it acts wonderful in *Kleda Shoshana* (~absorb moisture), *Shothahar* (~ which reduces swelling), *Pitta-shaman karma* (~subside *Pitta*). It helps to break *Samprapti* of *Vyadhi*. *Rasayan Choorna*^[18] It consist of *Guduchi*, *Gokshura* and *Amalaki*. Described in *Rasayan chikitsa* *adhikar*, it works as anti-inflammatory, helps in healing process of bladder mucosa, damaged by chronic nature of the disease, might help in re-establishment of bladder mucosa.

CONCLUSION

While conventional treatments provide only temporary relief with some potential adverse effects in Interstitial Cystitis, this case demonstrates the effectiveness of *Ayurvedic* management. Depending upon *Samprapti Ghatak* (~pathological factors), *Lakshana*(~symptoms) patient was treated as *Vata-Pittaja Mutrakruccha*. *Avapidak Snehapan*(~a specific mode of lipid administration), *Shamana Chikitsa*(~palliative therapy), and supportive lifestyle modifications led to significant and sustained relief. The patient's symptoms, including painful and frequent micturition, burning sensation, and associated constipation, were completely resolved over six months. This outcome highlights the potential of *Ayurvedic* therapies in addressing the underlying *dosha* imbalance and restoring bladder mucosal health. Further clinical studies are warranted to validate these findings and establish standard protocols for similar chronic urological disorders.

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