



A PITTAJA MOOTRAKRUCHRA: A CASE STUDY

Dr. Sanjay A. Dhurve¹, Dr. Shraddha Pandagale²

1.M.D., Ph.D., Associate Professor, Department of Kayachikitsa, College of Ayurved Bharati Vidyapeeth (Deemed to Be) University, Pune, Maharashtra, India. Mobile. No. 9850044207,

2.M.D Scholar (Kayachikitsa), Department of Kayachikitsa, College of Ayurveda, BV University, Pune, Maharashtra Mobile. No. 7020516492.

dr.sanjaydhurve@gmail.com, shraddhapandagale53@gmail.com

ABSTRACT: Pittaj Mootrakruchra resembles with Urinary tract infection by symptoms of modern medicine. The Lakshanas of Pittaja Mutrakrichhra are Peetamutrata, Sadahamutrata, Krichhramutrata, Saraktamutrata, Muhurmuhar Mutra Pravrutti. Infections confined to Lower UTI commonly cause dysuria with burning micturition, frequency and urgency. Lower urinary tract infection includes cystitis and urethritis. These infections considered superficial (or mucosal) infections. Hence this attempt of present article made to define Pittaja Mutrakrichhra on scientific way w.s.r. LUTI. The disease Pittaja Mutrakricchra is well acknowledged in classical texts of Ayurveda, with different treatment modalities, which can be concurrent to urinary tract infection on theoretical and clinical symptomatology of diseases.

Here in this article, we discuss about case of urinary tract infection & which treat by Ayurveda successfully.

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

INTRODUCTION: According to Modern medicine, Urinary tract infections are the second most common type of infection in the body, accounting for about 8.1 million visits to health care providers each year. Around 1% boys and 3% girls will develop UTI during childhood, and 50% of women will be treated for at least one UTI during their life time.

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 year. UTI commonly encounters with Escherichia coli accounts for about 85% of community acquired.

According to Ayurveda, Pittaj Mootrakruchra due to consumption of Ushna, Tikсна, Ruksha Ahara, and Mutra Vegadharana, less water intake, maintaining poor hygiene leads to aggravation of Pitta followed by Kapha and Vata causes impairment in the functioning of Basti. Dosha, Dhatu and Mala are the building blocks of the body.^[1] For a healthy body one should have equilibrium of Dosha and Dhatu, in the same way proper and continuous excretion of Mala is of equal importance.

Among Trimala, Mutra is responsible for Bastipoorana and Kleda Vahanam.^[2] When this physiology is hampered it leads to Mutravaha Sroto Dusti Vikaras. Amongst them Pittaja

Mutrakrichhra is commonly occurring condition, in which subject complaining the Shulayukta, Raktayukta, Dahayukta, and Muhurmuhur Mutrapravrutti etc.

When person indulges in Nidana Sevana like intake of Ati Ruksha, Ushna, Tikshna Ahara and the person indulges in Vyavaya or intake of Ahara and Udakapana during the urge of micturation, Mutra Vegadharana, Ati Vyavaya and Atigamana on Gajavaji, leads to diseases of Mutravahasrotodusti Vikaras. In present era these above said Nidana's are commonly observed due to working pattern or busy schedule or present life style of a person and indulging in such type of etiology causes vitiation of all the three Doshas which accumulates in urinary system and does the vitiation of Mutra and causes Pittaja Mutrakrichhra. It can be concurrent to lower UTI where dysuria, burning micturition and increased frequency of urination etc. are most regular complaint.

A DETAILED CASE HISTORY: A 32 years old female, living in Pune, presented in the Outpatient Department (OPD) of Bharati Ayurved Hospital on 05/05/23 with complaints of painful and burning micturition, increased frequency of urination with scanty flow, persistent urge to urine. These symptoms were recurring off and on from the past 8 days. The symptoms were so severe that she is came in OPD to take a ayurvedic treatment.

On examination, her prakriti (body constitution) was Pitta-Vataj, her Agni Bala (Digestive power) was Madhyam and Sharir Bala (physique) was madhyama (medium). Systemic examination did not reveal any abnormality. Routine hematological investigations Hb- 11.9gm/dl, TLC – 8500/cmm, plt – 40400. RBS- 111mg/dl. In urine R examination, pus cells were 14 to 16 hpf, epithelial cells 5-6 & urine culture & sensitivity – no growth seen.

A patient having symptoms Peeta Mootrata, Saruja Mootrata, Sadaha Mootrata, Kruchra Mootrata, Sarakta Mootrata, Satata Mootrapravritti, after 14th day treatment it recovers totally. Urine routine examination, 3-4/ hpf pus cells were found. Epithelial cells were 3-4/ hpf.

REVIEW OF LITERATURE: The clinical presentation of the Pittaja Mutrakrichhra can be correlated to lower urinary tract infection. Urinary tract infections are the second most common type of infection in the body, accounting for about 8.1 million visits to health care providers each year^[3] And 50% of women will be treated for at least one UTI during their life time.^[4] The symptoms of Pittaja Mutrakrichhra such as Saruja / Kruchhra Mutrapravrutti, Sarakta Mutrata, Sadaha Mutrata, Muhurmuhu Mutrapravrutti^[5] are coincide with the symptoms of lower urinary tract infection. Urinary tract infections such as abnormal colour of urine can be compared with Sarakta/ Sapeeta Mutrata, burning sensation while micturition can be compared with Sadaha Mutrapravrutti and pain while micturition can be compared with Kruchra Mutrapravrutti, Frequency and urgency can be compared with Muhurmuhu Mutrapravrutti and suprapubic pain and strangury can be compared with Saruja / Kruchhra Mutrata. Nidana - Pittaja Mutrakrichhra

The manifestation of any disease is described in five steps in Ayurveda these are Nidana, Purvarupa, Rupa, Upashaya and Samprapti. These help in proper diagnosis of disease^[6]

1) Samanya Nidana^[7]: The specific Nidana for Pittaja Mutrakrichhra were not available in classics. So etiological factors which have mentioned for Mutrakrichhra Roga can be taken as Nidana of Pittaja Mutrakrichhra. The Nidanas which are responsible for Mutravaha Srotodusti can also take as Samanya Nidana for Pittaja Mutrakrichhra.

1. Mutrito Udaka-Bhaksya-Strisevana (indulges in sex or eating or drinking under the urge of micturition).
2. Mutra Vega Dharana (suppression of urge of micturition)
3. Kshina (weak or malnourished person)
4. Abhighata (injury to Mutravaha srotas)

VISHISTA NIDANA ^[8]: Aharaja Nidana Rooksha Ahara Sevana, Madhya Sevana, Tikshna Aushada Sevan, Anooopa Mamsa Sevana, Matsya, Sevana, Adysana, Ajeerna Bhojana, Katu Amla Lavana Sevana. Viharaja Nidana Ativyayama, Ati Vyavaya, Nityadhrtaprushtayana, Sandharana, Katiskanda Bhara Vahana.^[9] Sushruta and Vagbhata have not mentioned Nidana while Madhava, Yogaratnakara have mentioned similar Nidanas as that of Charaka.

Samprapti From Nidana Sevana until the appearance of Vyadhi, there is sequence of pathological changes taking place in the body, all these put collectively under the name of Samprapti. Acharya Charak has explained common Samprapti for Pittaja Mutra Krichhra which is as follows: When respective Doshas vitiated by their own Nidanas and get lodged in the Basti and Mutramarga and produces Samrodha, Sankocha, and Kshobha in Mutra Marga, then Pittaja Mutrakrichhra is produced. In Kashyapa Samhita,^[10] it is described that Mutrakrichhra is Pittapradhana Tridoshaja Vyadhi. Even Acharya Harita also said that Mutrakrichhra is Pitta Pradhana Vyadhi and he mentioned more etiological factors related to Pitta Prakopa Nidanas.

SAMPRAPTI GHATAKA

Dosha: Pittapradhana Tridosha

Dushya: Mutra, Rakta

Srotas: Mutravaha, Raktavaha.

Sroto Dusti Prakara: Sanga

Agni: Jataragni and Dhatwagni

Ama: Jataragni & Dhatwagni Mandya Janya

Udbhavasthana: Pakwashaya

Sanchara Sthana: Mutramarga

Vyakt Stana: Mutramarga

Rogamarga : Madyama

Purvaroopo These are the characteristics which appear before the actual manifestation of Vyadhi and are expressed in milder or incomplete form. There is no textual reference regarding the Purvaroopo of Pittaja Mutrakrichhra but while Chakrapani says that Lakshnas of Vyadhi which are expressed in milder form are to be considered as Purvarupa.

The different Lakshanas of Pittaja Mutrakrichhra when expressed in milder form are to be considered as Purvaroopo of Pittaja Mutrakrichhra. Rupa The symptoms which occur after the

complete manifestation of Vyadhi. These become evident in Vyaktavasta of the Shatkriyakala. Rupa manifested in Vyaktavasta of Pittaja Mutrakrichhra are as follows:

SAMANYA LAXANAS ^[11]: Ati Srusta - Adika Mutrata. Ati Badhdha - Difficulty during Mutra Pravrutti. Prakupita- Changes in physical, chemical properties of Mutra. Alpa Alpa Abheekshana - Shoola Yukta Alpa Pravrutti / Scanty urination. Laxanas of Pittaja Mutrakrichhra ^[12]

All Acharyas explained Lakshanas's like Peeta Mutrata, Sarakta Mutrata, and Saruja, Sadahayukta Mutra Pravrutti. Sushrutacharya added Haridra Mutrata and Daha in Mushka and Basti Pradesha. Atiushana Mutrata is told by both Sushrutacharya and Kashyapacharya. Sadhyasadhyata^[13] Gada Nigraha is the only text which explains about the Sadhyasadhyata of the disease Mutrakrichhra in general. Both Laghutrayis and Brihatrayis do not mention about Sadhayasahdyta of this disease.

UPADRAVAS: Upadrasvas of Mutrakrichhra in general are explained by Acharya Kasyapa.^[14] Those are as: Karshya, Arati, Aruchi, Anavasthiti, Thrishna, Shoola, Vishada.

UPASHAYA – ANUPASHAYA: means which gives pleasure to the person by the use of medicine, diets, and regimens. Their action may directly against the cause or the disease. Below mentioned Aushada, Ahara, Vihara were to be considered as beneficial for the Pittaja Mutrakrichhra. Apathya^[15]

Apathya is unwholesome food or regimens which adversely affect the body and mind. The following Ahara and Vihara are Apathya in Pittaja Mutrakrichhra. Ahara: Food article having Kashaya, Amla Rasa, Tikshna, Shuska, Rukshaahara's. Sangrahi and Vidhahi Ahara. Madhya Sevana, Pishtanna, Vatarka, Kharjura, Kapitta, Jambu, Tambula, Matsya, Hingu Tila, Sarshapa Taila Bharjita Lavana and Ardrak, Pinyaka. Vihara: Ati Vyayama, Mutra Vegadharana, Ativyavaya, Ativata Atapa, Shrama, Gajavaji Yana.

MODERN MEDICINE: Lower Urinary Tract Infection Definition Urinary Tract Infection is a common, distressing and occasionally life threatening condition. UTI is defined as multiplication of organisms in the urinary tract.^[16] Acute infections of the urinary tract infection fall into two general anatomic categories: lower tract infection (Urethritis and Cystitis) and upper tract infection (Pyelonephritis, Prostatitis). Infections of the urethra and bladder are often considered superficial (or mucosal) infections. From microbiologic perspective, urinary tract infection exists when pathogenic microorganisms are detected in the urine, urethra, bladder. In most instances, growth of $\geq 10^5$ organisms per milliliter from a properly collected midstream urine sample indicates infection.^[17] Etiology ^[18] Many microorganisms can infect the urinary tract, but by far the most common agents are the gram-negative bacilli. Escherichia coli cause ~80% of acute infections in patients without catheters, urologic abnormalities, or calculi. Other gram-negative rods, especially Proteus and Klebsiella spp, accounts for a smaller proportion of uncomplicated infections. Gram – positive cocci play a lesser role in UTIs. Pathogenesis In the vast majority of UTI's bacteria gain access to the bladder via the urethra. The occurrence and course of a UTI is influenced by the integrity of the host defense and by bacterial virulence factors. Disruption of the highly specialized transitional cell epithelium which lines the urinary tract. Incomplete bladder emptying, anatomical abnormalities, and the presence of foreign body, such as a urinary catheter, these contribute to disruption of the host defense and increase the likelihood of infection. Sexual intercourse, use of condoms, and use of spermicides all increase the risk.

Bacterial characteristics that determine their ability to cause infection include specific mechanisms to adhere to the uroepithelium ('pilli' or 'fimbrias' in the case of certain *E. coli*), or adaptations allowing them to colonize foreign surfaces, such as a urinary catheter and subsequently cause infection.^[19] Clinical Features The clinical features depend on whether the infection involves the upper or lower urinary tract. Irritative voiding symptoms are more common in lower tract infection.

COMMON SYMPTOMS OF LOWER UTI ^[20]: 1) Severe dysuria, worse towards the end of or immediately after micturition. 2) Abrupt onset of frequency of micturition. 3) Suprapubic pain during and after voiding. 4) Intense desire to pass more urine after micturition, due to spasm of the inflamed bladder wall (urgency). Microscopic or visible hematuria. 5) Urine that may appear cloudy and have an unpleasant odour.

DISCUSSION: Mootrakrucchrahara Quath contains Gokshur, Vidari, Madhuyashti, Madhu, Shuddha Ras Sindoor.

All of ingredients has a diuretic property. With The Katu, Tikta, Kashay Rasa, Sheeta Veerya it acts on the Mootravaha Strotas. Gokshur also acts as antibacterial. With Sheeta Veerya drugs Sadahata, Ushnata was restored.

In classics 8 types of Mutrakrichhra has been explained among them Pittaja Mutrakrichhra is having its own importance. The Laxanas are Shoolayukta, Raktayukta / Peetayukta, Dahayukta, and Muhurmuhu Mutra Pravrutti. Pittaja Mutrakrichhra can be correlated to lower UTI in modern science. LUTI refers to inflammation of urethra and bladder produce symptoms like hematuria, painful urination with burning sensation, frequent micturition. In the present era due to consuming excess spicy, fried and junk foods leads to increase incidence of Pittaja Mutrakrichhra. And in working people absurd life style modification, abnormally changed food and personal habits and suppressing the urge of micturition are said to be the etiological factors for the manifestation of this disease. Pittaja Mutrakrichhra Nidana's like Ativyayama, Ativyavaya, travelling on Ashwa, Shrama vitiate Vata Dosha and Tikshnaushadha Sevana, Madhya Sevana, Katu Amla Lavanarasa Pradhana Ahara Sevana, Kati Skandha Ati Dharana aggravate Pitta Dosha and Samanya Mutravaha Sroto Dusti Karanas are also responsible for production of Kha-Vaigunya in Basti leads to Pittaja Mutrakrichhra. In modern science microorganisms are considered to be sole cause of UTI. Though Ayurvedic classical text contains references of Krimi causation of Mutrakrichhra by them has not been mentioned. The modern theories of pathogenesis suggest that bacteria gain access to bladder via urethra. From an Ayurvedic point of view even in Agantujakaranas Doshaprakopa is the main cause for the Vyadhi. Most of Nidana of Pittaja Mutrakrichhra causes vitiation of Pitta and Vata Dosha. Pitta spreads in to general circulation with the help of Vyana Vayu or Rasa. Then aggravated Pachaka Pitta and Samana Vayu leads to Dhavagnimandyta. As a result, Kleda is formed in excess. Dushita Kleda inturn affects the quantity of Mutra and disturbs the concentration of urine. Vitiated Pitta results in Haridra Mutra. Vitiated Pitta along with Pratiloma Gati of Apana Vayu obstructs the urinary pathway resulting in burning type of pain during micturition. The Laxanas like Daha, Peeta and Raktavarna Mutra Pravrutti or Haridra Varna indicative of Pitta Prakopa. It indicates increased concentration of urine. Sarakta Mutra indicates high content of RBCs in urine. Lower Urinary Tract Infection are often considered as superficial infections and are common in female patients. while Osha, Chosa, Daha is the Nantamaja Vikaras of Pitta. So, it can be inferred that, pain is burning type in Pittaja Mutrakrichhra. The Ruja referred in this variety explains the result and effect of Pitta Dusti

(inflammation). Daha is Pitta Prakopa Laxana and more accentuated in Pittaja Mutrakrichhra. Muhurmuhu Mutrapravrutti is due to inflammation of the bladder wall. It leads to reduction in bladder, capacity and stimulation of the stretch receptors in bladder wall. Abrupt onset of dysuria (includes pain, burning, and strangury), increased frequency, Urgency, suprapubic pain and pyuria are the symptoms of lower UTI i.e., cystitis and urethritis. Dysuria is the painful & difficult urination that is usually caused by inflammation. Pain occurring at the start of urination may indicate urethral pathology, if pain occurs at the end of the micturition is usually of bladder origin and accompanied by spasm of the pelvic musculature. Increased frequency of micturition is due to decreased bladder capacity with resultant decrease in the volume of urine per voiding and irritation of inflamed bladder. Urgency is strong and sudden impulse to void. The sensation may be so strong enough to overcome sphincter control. Urgency is main symptom present in cystitis and absent in urethritis which distinguishes it from cystitis. Pyuria is presence of pus cells in urine. Urine pus cells diagnostic of urinary tract infection are living or dead leukocytes (white blood cells), specifically neutrophils, which attack the bacteria and prevent infection. Urine culture and antimicrobial susceptibility testing be performed for any patient with a suspected UTI. Pittaja Mutrakrichhra is a Pakwashaya Samutta Vyadhi. Basti is one of the three Marmas which is affected in Mutrakrichhra so, the disease is said to be of Madhyama Roga Marga. Upashaya is one which relieves the symptoms. For Pittaja Mutrakrichhra Abhyanga and Avagaha, Pradeha are the Viharaja Upashaya. Snehana and Swedana in the form of Abhyanga and Avagaha. Avagaha Sweda is a Drava Sweda which specially indicated in Pitta Samsruta Vata, keeping in view of local lesions and inflammation. Sheeta Sheka and Sheeta Pradeha and Greeshma Vidhi is described in Pittaja Mutrakricchhra in order to pacify the Ushna, Tikshna Guna of Pitta which is responsible for Sadaha, Sapeeta and Sarakta Mutrapravrutti. Greeshma Vidhi includes avoiding Vyayama, Atapa, Madya etc. and Shita, Madura, Snighda Ahara Sevana. In Shamana Aushadi of Pittaja Mutrakrichhra, Truna Panchmoola, Shatavari Kwata, Kharjuradi Churna along with Anupana like Sharkara, Madhu, and Ghrita are most commonly used. All these drugs have Mutrala, Dahanashaka, Shoolahara, Pittahara properties by the virtue of Madhura and Kashaya Rasa, Shita Virya and Madhura Vipaka. Anupshaya is one which aggravates the symptoms. For Pittaja Mutrakrichhra measures causing alleviation and vitiation of Pitta can be considered as Upashaya and Anupashaya. By avoiding Apathya (Nidana) and following Pathya mentioned in Pittaja Mutrakrichhra prevents disease itself and further complications.

CONCLUSION: From this case study we can conclude that Mootrakruchrahara Qwath is very beneficial for Pittaj Mootrakruchra.

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