# IAMJ

International Ayurvedic Medical Journal

### A CLINICO-PATHOLOGICAL STUDY ON THE DISORDER OF MUTRAVAHA SROTAS WITH ITS MODERN INTERPRETATION W.S.R.TO MUTRAKRICHHRA (DYSURIA)

Mahanta Rabi Narayan<sup>1</sup>, Panda P.K.<sup>2</sup> Gupta Ankit <sup>3</sup> Panigrahy Aruna Kumar<sup>4</sup> <sup>1</sup>Reader, Dept.Kayachikitsa, Sri Sai Ayurvedic Medical College, Aligarh, Uttar Pradesh, India <sup>2</sup> Prof. &Head, Dept. Roga Nidan, Govt. Ayurvedic College, Bolangir, Orissa, India <sup>3</sup> P.G. Scholar, Sri Sai Ayurvedic Medical College, Aligarh, Uttar Pradesh, India <sup>4</sup> Reader, Dept. of Maulik Sidhhānt & Samhitā, J.D. Ayurvedic Medical College, Aligarh, Uttar Pradesh, India

#### ABSTRACT

Now-a- days it is seems that, several patients are reporting to the hospitals regularly with affected from different disorders of *Mutravaha Srotas*. *Mutrakrichhra* is one of the important disease amongst these diseases. In present days maximum people are suffering from this disease. This may be possible due to either intake of low water or due to intake of polluted water. So, it becomes important to know the details about this disease according to *Ayurveda* as well as modern view. In this study 25 patients of *Mutrakrichhra* has been selected according to the classical sign and symptoms as described in *Ayurvedic* classics. Then all patients were undergone through pathological study as per modern parameters. It is found that, maximum 11 (44%) patients having dominant clinical feature of burning *micturation* were infected with *E.coli*.Other varieties of *Mutrakrichhra* was *interpretated* according to modern medical science.

KEYWORDS: Mutravaha Srotas, Mutrakrichhra, Dysuria, Urinary Tract Infection.

#### **INTRODUCTION**

*Ayurveda*, is the most ancient medical science which deals with preventive as well as curative measure of various diseases. The disorders of *Mutravaha Srotas*<sup>1</sup> i.e. *Mutrakricchra*, *Mutrāghāta*, *Mutrāśmari* etc. are described very clearly by the ancient *Ayurvedic* scientists. Now a day, number of patients are reporting to different hospitals for the treatment of the disorders of *Mutravaha srotas*. So, it became necessary to know in details about these diseases in terms of their etiology, pathogenesis, sign and symptoms etc. in *Ayurvedic* view as well as modern view for the successful treatment of these diseases. In this study, an effort has been made to re-

establish, the disease *Mutrakrichhra* as described in *Ayurvedic* classics and interpret it according to the modern medical science by applying modern pathological parameters.

A study has been carried out at Sri Sai Ayurvedic Medical College, Aligarh (U.P) on 25 patients of different types of *Mutrakrichhr*a to establish the description of *Ayurvedic* classics and interprete each type of *Mutrakrichhra* with modern view. In this study, it is observed that maximum 11 patients (44%) of *Pittaja* variety of *Mutrakrichhra*, out of 25 were infected with *E.coli. So, E.coli* is the most common organism for the development of this disease. Other organisms like *Klebsiella, E.proteus* and Pseudomonas are also responsible for manifestation of this disease.

### AIMS AND OBJECTIVES

- 1) A critical review of available literatures in *Ayurveda* on *Mutrakrichhra*.
- 2) Correlation of each sign and symptoms of *Mutrakrichhra* as description given in modern medical texts.
- Standardization of diagnosis of *Mutra-krichhra* on application of Modern Medical tools and Laboratory Techniques.
- Interpretation of *Ayurvedic* description on this disease on parlance of Modern Medical Science.
- 5) To re-establish and prove *Ayurvedic* description of this diseases by applying modern medical parameters.

#### **MATERIAL & METHODS**

25 patients of *Mutrakrichhra* were selected for this study, on the basis of clinical sign and symptoms like<sup>2</sup>:-Scanty *micturation*, Increased frequency, Burning *micturation* with pain, Sometimes *micturation* mixed with blood and hotness of urine etc. as described in *Ayurvedic* and modern literature.

**NATURE OF STUDY :** Open randomized Patho-Clinical study.

#### STUDY DESIGN

The patients attended the O.P.D/I.P.D. of Sri Sai Ayurvedic Medical College, Aligarh during the year 2014, have been randomly selected irrespective of their Age, Sex, Religion, Race, Occupation etc.

#### Inclusion criteria:

Subjective Parameters: Patients having classical signs and symptoms of *Mutrakricchra* like:- Painful burning *micturation*, Increased frequency, Scanty *micturation*, Pain in lower abdomen and penis, Heaviness in bladder, sometimes urine mixed with blood etc.

**Exclusion Criteria:** Complications like thyroid disorders and cardiac illness etc.

PATHO-CLINICAL STUDY Table No.01

No. Of Patients	Subjective Parameters	OBJECTIVE Urine (RE & ME)	PARAMETERS Organism Iso- lated (In C&S Test)	USG Findings	Ayurvedic Diagno- sis & Correlated Diagnosis
11 (44%)	Burning Sensation is a dominant feature	Pus Cell	E. coli	No spe- cific find- ing	<i>Pittaja Mutrakrich- hra</i> (Dysuria due to U.T.I. by E.coli)
5 (20%)	Pain is a dominant feature	No specific finding	Klebsiella	No spe- cific find- ing	<i>Vātaja Mutrakrichhra</i> (Dysuria due to U.T.I. by Klebsiela)

Mahanta Rabi Narayan Et & All:A Clinico-Pathological Study On The Disorder Of Mutravaha Srotas With Its Modern Interpretation W.S.R.To Mutrakrichhra (Dysuria)

5	Pain &	Small Crys-	No Organisms	Multiple	Aśmarija Mutrak-
(20%)	Burning	tals & Pus		calculus	richhra
	sensation	Cells found		seen	(Dysuria)
	Sometimes				
	blood				
	mixed urine				
2	Mild pain	Pus Cell	E.proteus	No spe-	Kaphaja Mutrak-
(08%)	& Heavi-			cific find-	richhra (Dysuria
	ness of			ing	due to U.T.I. by
	Bladder				E.proteus)
2	Mixed	Pus Cell	Pseudomonas	No spe-	Sannipātaja
(08%)	Symptoms			cific find-	Mutrakrichhra (Dy-
				ing	ria due to U.T.I.
					y Pseudomonas)

### **KEY OBSERVATION & RESULT**

Table No.02				
Organism isolated	No. of Patients	Percentage		
E-Coli	11	44%		
E. proteus	02	08%		
Pseudomons	02	08%		
No organigm	05	20%		
Coagulase +ve or -ve	00	00%		
Staphylococcus				
Klebsiella	05	20%		

From the above study it was observed that, 44% patients were infected with *E.Coli*, 20% patients were infected with *Klebsiella* and 02% each were found infected with *E.Proteus* and *Pseudomons*. No organism was isolated during culture and sensitivity test of urine in 05 (20%) patients.

## Results on the Patho-Clinical study of the Patients of MUTRAKRICCHRA

Among 25 trial Patients of *Mutrakricchra* it was observed:

1) *Pittaja Mutrakricchra* was most prevalent , followed by *Aśmarijanya & Vātaja Mutrakrichhra*.

2) From the culture & sensitivity test, it was observed that *Pittaja Mutrakricchra* is developed due to the infection of E.coli.

3) *Vātaja Mutrakricchra* was developed due to the infection of *Klebsiella*.

4) *Kaphaja Mutrakricchra* was developed due to infection of *E.proteus* 

5) *Sannipātaja Mutrakricchra* was developed due to infection of *Pseudomonas* 

6) *Aśmarijanya Mutrakricchra* was developed due to the presence of multiple Calculi.

#### CORRELATION AND MODERN IN-TERPRETATION

From the above detail Literary as well as Patho-Clinical study carried out on "MU-TRAKRICCHRA", it reveals that this disease may be correlated and interpretated with Dysuria, which is developed due to "Urinary Tract Infection". The sign and symptoms of the classifications<sup>3</sup> of "*Mutrakrichhra*" may be correlated and interpretated with modern medical science as described under;

i) *Vātaja Mutrakricchra*:<sup>4</sup> The sign and symptoms of "*Vātaja Mutrakrichhra*" like-Severe pain, scanty micturation, increased frequency with urgency, *Saphena mutrata* (frothy urine) and constipation are found in Urinary tract infection developed due to infection of *Klebsiella*. So, this may be correlated & interpretated with "*Dysuria*" developed due to Urinary tract Infection by the organism *Klebciella*.

ii) *Pittaja Mutrakricchra*:<sup>5</sup> The sign and symptoms of "Pittaja Mutrakricchra" likepassing of yellowish color urine, Pain with burning micturation, Sometimes urine mixed with blood, Increased frequency, Hotness of urine etc. are found similar with Dysuria developed due to urinary tract infection by E.Coli. So, *Pittaja Mutrakricchra* may be correlated & interpretated with "*Dysuria*" developed due to U.T.I. by the organism *E.Coli*.

iii) *Kaphaja Mutrakricchra*:<sup>6</sup>The sign and symptoms of "*Kaphaja Mutrakricchra*" like-Heaviness in supra pubic region, passes of slimy and whitish color urine, Passage of large quantity of cold urine etc. are found similar with Dysuria developed due to U.T.I. by Proteus. So, *Kaphaja Mutrakricchra* may be correlated & interpretated with "*Dysuria*" developed due to U.T.I. by the organism *Proteus*.

iv) *Sannipātaja Mutrakricchra*:<sup>7</sup>The altogether sign and symptoms of *Vātaja*, *Pittaja* and Kaphaja Mutrakrichhra are found in *Sannipātaja Mutrakricchra*. These sign and symptoms are found in Dysuria developed due to U.T.I. by mixed infection of Pseudonymous. So, *Sannipātaja* Mutrakricchra may be correlated & interpretated with "*Dysuria*" developed due to U.T.I. by mixed infection of "*Pseudonymous*".

v) **Raktaja or Abhighātaja Mutrakricchra:**<sup>8</sup>The sign and symptoms of "*Raktaja or Abhighātaja Mutrakricchra*" like acute pain in bladder region, distention of bladder, heaviness in bladder, lightness of bladder occurred when accumulated blood expels out from bladder; are found in traumatic *dysuria*.So, this may be correlated & interpretated with *traumatic dysuria*.

vi) *Śukraja Mutrakricchra*:<sup>9</sup>The sign and symptoms of *"Shukraja Mutrakricchra"* like-Passage of urine mixed with semen, Pain in bladder and penis, Stiffness and edema of testes and Passage of urine with difficulty are found similar to the sign and symptoms of Dysuria developed due to the stagnation of semen in urethra. So, *"Śukraja Mutrakrichhra"* may be correlated and interpretated with *"Dysuria"* developed due to *"Stagnation of semen in urethra"*.

vii) *Aśmarijanya Mutrakricchra*:<sup>10</sup>The sign and symptoms of "*Aśmarijanya Mutrakricchra*" like- Passage of urine mixed with blood, when stone moves down then patient pass urine easily, Pain during micturation, Pain in lumber and hypo gastric region; are found similar with the sign and symptoms of *Dysuria* developed due to obstruction by renal calculus. So, "*Aśmarijanya* 

*Mutrakricchra*" may be correlated & interpretated with "*Obstruction of urine due to Renal Calculus*".

viii)*Śakritjanya Mutrakricchra*:<sup>11</sup>The sign and symptoms of "*Śakritjanya Mutrakrichhra*" like-Pain in abdomen, Flatulence and Obstruction of Urine are found similar with the sign and symptoms of "Obstruction of Urine due to severe constipation. So "Śakritjanya Mutrakricchra" may be correlated & interpretated with "Dysuria developed due to the Severe Constipation".

#### **DISCUSSION & CONCLUSION**

The disease *Mutrakrichhra* is described in all leading *Ayurvedic* classics under the disorders of *Mutravaha srotas*. The common sign and symptoms of this disease are Scanty micturation, Increased frequency, Burning *micturation* with pain, Sometimes *micturation* mixed with blood and hotness of urine etc. All above sign and symptoms are found **Table No.03**  similar with "*Dysuria*" developed due to urinary tract infection by different organisms. The common isolated organisms are E.coli, Proteus mirabilis, Pseudomonas aeruginosa and *Klebsiella* aerogenes. *Dysuria* due to Urinary Tract Infection is developed mainly due to infection of *E.coli and Klebsiella* aerogenes.

From the above study it established that, the disease *Mutrakrichhra* can be correlated and interpretated with *Dysuria* due to Urinary Tract Infection according to modern medical science. The classifications of *Mutrakrichhra* can be correlated with modern medical science as under;

SLN	<b>CLASSIFICATION OF MUTRA-</b>	MODERN INTERPRETATION
0.	KRICCHRA	
1	Vātaja Mutrakricchra	<i>Dysuria</i> developed due to U.T.I. by <i>Kleb-siella</i>
2	Pittaja Mutrakricchra	Dysuria developed due to U.T.I. by E. coli
3	Kaphaja Mutrakricchra	Dysuria developed due to U.T.I. by E. proteus
4	Sannipātaja Mutrakricchra	<i>Dysuria</i> developed due to U.T.I. by <i>Pseu-</i> <i>domonas</i>
5	Aśmarijanya Mutrakricchra	Obstruction of Urine due to Renal Calcu- lus
REFE	RENCES	Srikanthadatta; Revised and Edited
1. 2.	Astānga Hrudayam of Śrimad Vāgbhatta, Edited by Brahmānanda Tripāthi, Published by Chaukhambā Sānskrit Pratisthān, Delhi, Reprint Edition -2003, Page No:-488. Robbins Basic Pathology, Edited by Kumar et al , Published by Elsevier, a division of Reed Elsevier India (P) Ltd., 17-A/1, Main Ring Road, Laj- pat Nagar, New Delhi-24, India, 7 <sup>th</sup>	<ul> <li>by Prof. Yadunandana Upādhyāy; Published by Chaukhambha Sanskrit Sansthān, Varanasi-22001; 16<sup>th</sup> Edi- tion 1986; Page No.502.</li> <li>4. Caraka Samhitā of Agniveśa Vol-II, Edited by Āchārya Vidyādhar Shukla &amp; Prof. Ravi Dutta Tripathi, Pub- lished by Chaukhamba Sanskrit Pra- tisthan, Delhi; Reprint Edition-2006; Page No.629.</li> </ul>
3.	Edition, 2004, Page No. 527-529. Mādhava Nidānam of Śri Mādhavakara By Śri Vijayarashita &	<ol> <li>Caraka Samhitā of Agniveśa Vol-II, Edited by Āchārya Vidyādhar Shukla &amp; Prof. Ravi Dutta Tripathi, Pub-</li> </ol>

lished by Chaukhamba Sanskrit Pratisthan, Delhi; Reprint Edition-2006; Page No.629.

- Caraka Samhitā of Agniveśa Vol-II, Edited by Āchārya Vidyādhar Shukla & Prof. Ravi Dutta Tripathi, Published by Chaukhamba Sanskrit Pratisthan, Delhi; Reprint Edition-2006; Page No.629.
- Caraka Samhitā of Agniveśa Vol-II, Edited by Āchārya Vidyādhar Shukla & Prof. Ravi Dutta Tripathi, Published by Chaukhamba Sanskrit Pratisthan, Delhi; Reprint Edition-2006; Page No.629.
- Caraka Samhitā of Agniveśa Vol-II, Edited by Āchārya Vidyādhar Shukla & Prof. Ravi Dutta Tripathi, Published by Chaukhamba Sanskrit Pratisthan, Delhi; Reprint Edition-2006; Page No.631.
- Caraka Samhitā of Agniveśa Vol-II, Edited by Āchārya Vidyādhar Shukla & Prof. Ravi Dutta Tripathi, Published by Chaukhamba Sanskrit Pra-

tisthan, Delhi; Reprint Edition-2006; Page No.631.

- Caraka Samhitā of Agniveśa Vol-II, Edited by Āchārya Vidyādhar Shukla & Prof. Ravi Dutta Tripathi, Published by Chaukhamba Sanskrit Pratisthan, Delhi; Reprint Edition-2006; Page No.630.
- 11. Mādhava Nidānam of Śri Mādhavakara By Śri Vijayarashita & Srikanthadatta; Revised and Edited by Prof. Yadunandana Upādhyāy; Published by Chaukhambha Sanskrit Sansthān, Varanasi-22001; 16<sup>th</sup> Edition 1986; Page No.503.

### **CORRESPONDING AUTHOR**

#### Dr. Mahanta Rabi Narayan M.D (Kayachikitsa) Reader, Dept. of Kayachikitsa Sri. Sai Ayurvedic Medical College, Aligarh,Uttar Pradesh, India E-mail:dr.rnmohanta@rediffmail.com

68 www.iamj.in