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

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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 suffring 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 were found due to infection of Klebsiela, E.proteus and Pseudomonas. After completion of the study, each type of Mutrakrichhra was interpreted 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 Srotas¹ i.e. Mutrakrichhra, Mutrághāta, Mutráśmari 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 Mutrakrichhra 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.
3) Standardization of diagnosis of Mutrakrichhra on application of Modern Medical tools and Laboratory Techniques.
4) 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

<table>
<thead>
<tr>
<th>No. Of Patients</th>
<th>Subjective Parameters</th>
<th>OBJECTIVE Urine (RE &amp; ME)</th>
<th>Organism Isolated (In C&amp;S Test)</th>
<th>USG Findings</th>
<th>Ayurvedic Diagnosis &amp; Correlated Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 (44%)</td>
<td>Burning Sensation is a dominant feature</td>
<td>Pus Cell</td>
<td>E. coli</td>
<td>No specific finding</td>
<td>Pittaja Mutrakrichhra (Dysuria due to U.T.I. by E.coli )</td>
</tr>
<tr>
<td>5 (20%)</td>
<td>Pain is a dominant feature</td>
<td>No specific finding</td>
<td>Klebsiella</td>
<td>No specific finding</td>
<td>Vātaja Mutrakrichhra (Dysuria due to U.T.I. by Klebsiela)</td>
</tr>
</tbody>
</table>

25 patients of Mutrakrichhra were selected for this study, on the basis of clinical sign and symptoms like:- 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 Mutrakrichhra 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
5 (20%) Pain & Burning sensation Small Crystals & Pus Cells found No Organisms Multiple calculus seen Aśmarija Mutrakrichhra (Dysuria)

2 (08%) Mild pain & Heaviness of Bladder Pus Cell E.proteus No specific finding Kaphaja Mutrakrichhra (Dysuria due to U.T.I. by E.proteus)

2 (08%) Mixed Symptoms Pus Cell Pseudomonas No specific finding Sannipātaja Mutrakrichhra (Dysuria due to U.T.I. by Pseudomonas)

**KEY OBSERVATION & RESULT**

**Table No.02**

<table>
<thead>
<tr>
<th>Organism isolated</th>
<th>No. of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Coli</td>
<td>11</td>
<td>44%</td>
</tr>
<tr>
<td>E. proteus</td>
<td>02</td>
<td>08%</td>
</tr>
<tr>
<td>Pseudomons</td>
<td>02</td>
<td>08%</td>
</tr>
<tr>
<td>No organigm</td>
<td>05</td>
<td>20%</td>
</tr>
<tr>
<td>Coagulase +ve or -ve Staphylococcus</td>
<td>00</td>
<td>00%</td>
</tr>
<tr>
<td>Klebsiella</td>
<td>05</td>
<td>20%</td>
</tr>
</tbody>
</table>

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 *Āśmarijanya & 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 *Pseudomons*  
6) *Āśmarijanya Mutrakricchra* was developed due to the presence of multiple Calculi.

**CORRELATION AND MODERN INTERPRETATION**

From the above detail Literary as well as Patho-Clinical study carried out on “MUTRAKRICCHRA”, it reveals that this disease may be correlated and interpreted with Dysuria, which is developed due to “Urinary Tract Infection”.
The sign and symptoms of the classifications³ of “Mutrakricchra” may be correlated and interpreted with modern medical science as described under;

i) **Vātaja Mutrakricchra:**⁴ The sign and symptoms of “Vātaja Mutrakricchra” 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 & interpreted with “Dysuria” developed due to Urinary tract Infection by the organism Klebsiella.

ii) **Pittaja Mutrakricchra:**⁵ The sign and symptoms of “Pittaja Mutrakricchra” like-passing 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 & interpreted with “Dysuria” developed due to U.T.I. by the organism E.Coli.

iii) **Kaphaja Mutrakricchra:**⁶ 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 & interpreted with “Dysuria” developed due to U.T.I. by the organism Proteus.

iv) **Sannipātaja Mutrakricchra:**⁷ The altogether sign and symptoms of Vātaja, Pittaja and Kaphaja Mutrakrichra 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 & interpreted with “Dysuria” developed due to U.T.I. by mixed infection of “Pseudonymous”.

v) **Raktaja or Abhighātaja Mutrakricchra:**⁸ 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 & interpreted with traumatic dysuria.

vi) **Śukraja Mutrakricchra:**⁹ The sign and symptoms of “Śukraja 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 Mutrakricchra” may be correlated and interpreted with “Dysuria” developed due to “Stagnation of semen in urethra”.

vii) **Aśmarijanya Mutrakricchra:**¹⁰ 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 & interpreted with “Obstruction of urine due to Renal Calculus”.

viii) **Śakritjanya Mutrakricchra:**¹¹ The sign and symptoms of “Śakritjanya Mutrakricchra” 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 & interpreted 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 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 interpreted 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;

Table No.03

<table>
<thead>
<tr>
<th>SLN</th>
<th>CLASSIFICATION OF MUTRAKRICCHRA</th>
<th>MODERN INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vātaja Mutrakricchra</td>
<td>Dysuria developed due to U.T.I. by Klebsiella</td>
</tr>
<tr>
<td>2</td>
<td>Pittaja Mutrakricchra</td>
<td>Dysuria developed due to U.T.I. by E. coli</td>
</tr>
<tr>
<td>3</td>
<td>Kaphaja Mutrakricchra</td>
<td>Dysuria developed due to U.T.I. by E. proteus</td>
</tr>
<tr>
<td>4</td>
<td>Sannipātaja Mutrakricchra</td>
<td>Dysuria developed due to U.T.I. by Pseudomonas</td>
</tr>
<tr>
<td>5</td>
<td>Aśmarijanya Mutrakricchra</td>
<td>Obstruction of Urine due to Renal Calculus</td>
</tr>
</tbody>
</table>

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