

A STUDY ON PREVALENCE OF DIFFERENT TYPES OF URINARY BACTERIA IN PITTAJA MUTRAKRICHHA**Dr. Mangi Lal^{1*} and Dr. Hemen Kalita²**¹PG Scholar, Dept. of Roga Nidan, Govt. Ayurvedic College, Guwahati, Assam.²Associate Professor, Dept. of Roga Nidan, Govt. Ayurvedic College, Guwahati, Assam.Article Received on
20 March 2024,Revised on 10 April 2024,
Accepted on 30 April 2024

DOI: 10.20959/wjpr20249-32281

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Nidan, Govt. Ayurvedic
College, Guwahati, Assam.**ABSTRACT**

Pittaja Mutrakrichha is a type of Mutrakrichha which comes under the disorder of mutravaha srotas. The symptoms of Mutrakrichha like Saruja, Sarakta, Sapeeta, Sadaha and Muhurmur Mutraprvarti closely resemble to lower Urinary tract infection. So Pittaja Mutrakrichha may manifest due to the Urinary pathogenic bacteria. Therefore, this study is an attempt to find out any relation between the Pittaja Mutrakrichha and Urinary bacteria. The study was carried out on 30 patients based on clinical symptoms, and urine culture examination was done for all the patients. After the study, a relation between Pittaja Mutrakrichha and pathogenic bacteria of urine was evaluated.

KEYWORDS: Pittaja Mutrakrichha, Lower Urinary tract infection, Urine culture.

INTRODUCTION

Mutrakrichha means difficulty and pain in urination or Mutra parivarti.^[1] In Ayurveda Texts it is classified into 8 types, Vataja, Pittaja, Kaphaja, Sanipataja, Abhigataja, Sakritabhighataja, Ashmrija and Sarkarja according to their Nidana and Lakashnas.^[2] Among these 8 types, Pittaja mutrakrichha is most prevalent and frequently occurring disease. The lakshana of Pittaja mutrakrichha are sapeeta (yellowish urine), sarakta (haematuria), Saruja (painful micturition), sadaha (Burning micturition) and muhur muhur (frequent micturition).^[3] In modern medicine most common cause of these symptoms like painful, burning, red micturition or dysuria commonly manifest in lower Urinary tract infection (infection of bladder and urethra). As we have seen that symptoms of both disease closely resemble. The description of Pittaja Mutrakriccha is found in all the major Ayurveda texts. It

reflects its prevalence since the ancient time. At present UTI is the second most common infection after respiratory infection in the community.^[4] The cause of UTI is infection due to many pathogenic bacteria like E.Coli, Klebsiella, Pseudomonas etc. UTI is Generally treated by Antibiotics but these antibiotics cause various side effects. So people always search for alternative medicine or therapy like Ayurveda. The lakshanas of Pittaja Mutrakrichha are resembles like symptoms of UTI. So the present study deal with the prevalence of urinary bacteria in Pittaja Mutrakrichha.

MATERIAL AND METHOD

A clinical study on 30 patients of Pittaja Mutrakrichha irrespective of a age and sex was done at Govt Ayurvedic College, Guwahati-14 on strict protocol. Urine culture examination was done on all the patients to find out any pathogenic organisms A minimum of 24 hrs incubation of urine culture was done and finally the morphological, biochemical and gram stain was done for identification. Every growth of organism was counted for colony count. Data of all findings were tabulated and evaluated statistically.

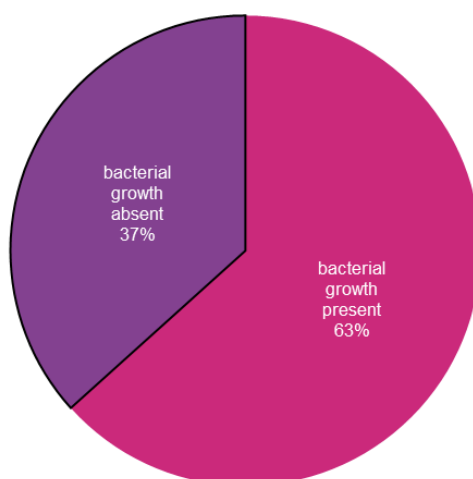
Assessment Criteria

- 1) Pittaja mutrakrichha was diagnosed according to as per Ayurvedic Classics.
- 2) Cases include only those have colony count is $>10^5$ CFU/ml
- 3) Every bacterial Growth was observed from pure culture
- 4) Data above 50% was considered under consideration.

Prevalence of bacteria in urine culture of Pittaja Mutrakrichha

Sl No.	No. Of observation (Total)	Bacterial growth present	Bacterial growth absent
1	30	19	11

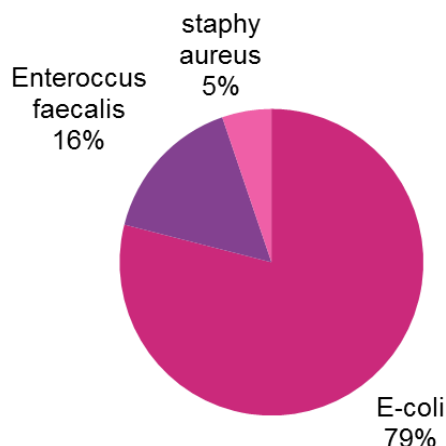
n=30



Prevalence of different types of bacteria in urine culture from pure growth.

Sl No.	Types of bacteria present	No. of observations
1	E-coli	15
2	Enterococcus faecalis	3
3	Staphylococcus aureus	1
	Total	19

n= 19

**DISCUSSION****1) Discussion on prevalence of Bacteria in Urine culture examinations in Pittaja Mutrakrichha**

In the study, urine culture examination of 30 patients of Pittaja Mutrakrichha shows 19 patients (comprising 63%) having pathogenic bacteria and 11 patients (comprising 37%) shows no bacterial growth. So, it can be concluded that Pittaja Mutrakrichha is mostly infective in origin related to any bacterial growth. Pittaja Mutrakrichha occurs due to the aggravation of pitta in mutravaha srotas. Vitiating of pitta may lead to bacterial infection or increase the chances of developing infection.

2) Discussion on prevalence of different types of bacteria in Pittaja Mutrakrichha

From the study it is observed *E. coli* (79%) is the most prevalent bacteria found in the study. Some study says *E. coli* can easily grow in acidic environment as compared to other urinary bacteria.^[5]

Moreover these all bacteria are ureas positive which causes the alkaline urine^[6] while E-coli induced uti causes acidic urine.^[7] Acidic urine may cause burning micturition which is commonest clinical feature of Pittaja Mutrakrichha.

So it can be concluded that Pittaja Mutrakrichha may be related to E- coli induced UTI.

CONCLUSION

- 1) From the study, it can be concluded that Pittaja Mutrakrichha may be related with pathogenic bacteria of urinary tract infection.
- 2) E-coli is the most prevalent bacteria for Pittaja Mutrakrichha found in the study.

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