



A STUDY OF CLINICAL PROFILE, INVESTIGATIONS, TREATMENT AND OUTCOME OF UTI

General Medicine

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ABSTRACT

UTI or urinary tract infections are one of the most common infectious problems that are frequently encountered in our office. A plethora of clinical profiles are encountered in our day to day practice. According to some studies around 25-30 percent of all infection cases are accounted by UTI. Resistant variants are also frequently encountered which adds the bulk to the difficulties that are already faced. So this study puts in an effort to find the clinical profile, investigations, treatment and outcome of UTI.

KEYWORDS

UTI, clinical profile, investigations, Treatment, Outcome.

INTRODUCTION:

UTI or urinary tract infections are one of the most common infectious problems that are frequently encountered in our office^{1,2}. A plethora of clinical profiles are encountered in our day to day practice³. According to some studies around 25-30 percent of all infection cases are accounted by UTI. Resistant variants are also frequently encountered which adds the bulk to the difficulties that are already faced^{4,7}.

Fever because of infection is the most common symptom that will be encountered but it is said that the symptoms actually depends upon a lot of factors and immunity is definitely the one to be considered^{8,9}. A plethora of signs and symptoms can be encountered in our day to day practice³. Lower abdominal pain, vomiting and flank pains are the other symptoms that patients commonly complain of^{10,11}. E-Coli is supposed to be the frequently and most commonly encountered bacteria in UTI. Diabetes and other immunosuppressed states account for more number of cases. Extended-spectrum beta-lactamases are enzymes that are produced by these bacteria that gives resistance to most beta-lactam antibiotics.^{12,13}

So this study puts in an effort to find the clinical profile, investigations, treatment and outcome of UTI.

AIMS AND OBJECTIVES:

To study the clinical profile, investigations, treatment and outcome of UTI.

MATERIALS AND METHODS:

This study was done in the Department of Medicine, Sridevi Institute of Medical Sciences and Research Hospital, Tumkur.

This study was done from September 2018 to March 2019.

This study was done using 100 patients who came with symptoms of UTI and were included when they were found to be positive for urine culture.

Inclusion criteria:

Urine culture positive

Exclusion Criteria:

Immuno-suppressant drugs
CKD and AKD patients
Previous history of UTI

RESULTS

Table 1: Age Distribution

Number	Mean age	Std Deviation
100	45.16 years	15.46 years

Table 2: Sex Distribution

Number	Male	Female
100	32	68

Table 3: Co-Morbidities:

Co-Morbidities:	Frequency
HTN	22
DM	59
DM and HTN	19

Table 4: Signs and Symptoms:

Signs and Symptoms	Frequency
Burning Micturition	49
Fever	71
Abdominal Pain	52
Vomiting	19
Quantity of urine decreased	07

Table 4: Bacterial Profile

Bacteria	Frequency
P - Pseudomonas aeruginosa	22
EC- Escherichia coli	59
AB- Acinetobacter baumannii	19
EA- Enterobacter aerogenes	11
K- Klebsiella pneumoniz	03
Mixed	38
MRSA	05

Table 5: Sensitivity

	EC	P	AB	EA	K	MRSA
Amikacin	8	3	1	2	3	
Gentamycin	6	4	1		3	
Ceftazidime	2				2	
Ciprofloxacin	2	1			3	
Norfloxacin					1	
Levofloxacin	4	1			3	
Nitrofurantoin						
Fosfomycin						
Trimethoprim/Sulfamethoxazole	2					1
Piperacillin/Tozabactam	2		1	2	2	
Tigecycline		1		1		
Cefta			1			
Amoxiclav		1				
Doripenem	4	3		1	1	
Meropenem	4	3		3	4	
Linezolid						1
Teicoplanin						1
Vancomycin						1
Tetracycline						1
Ceftazidime	1				2	
Cefexime		1			2	
Cefoperazone/Sulbactam	1			2	2	
Cefepime	2	1			2	
ceftazidime					2	
Ampicillin/Sulbactam			1			

Table 6: Recurrence.

Follow Up	Recurrence frequency after treatment
1st week	03
2nd week	Nil
3rd week	11
4th week	16
5th week	Nil
6th week	02

DISCUSSION:

The total number of cases that were taken were 100. The mean age of the population was 45.16 years and the standard deviation was 15.16 years.

There were 22 males and 68 females in the study Hypertension was observed in 22 patients and 59 patients were known diabetics and 19 of them were known hypertensives and diabetics.

Fever was present in 71 patients followed by abdominal pain in 52 patients. The burning micturition was found in 49 patients. The vomiting was complained in 19 patients and decreased quantity of urine was complained in seven patients.

In majority of the cases the E-Coli was found to be the organism and there were fixed infections. The most common effective drug was found to be Amikacin and Gentamycin. MRSA was found in 5 patients. 32 percent of the cases were found to be recurrent after 6 weeks.

The patients were followed each week for six weeks and only thirty two percent of the cases showed recurrence.

The study conducted stands in agreement with other studies.^{14,15}

CONCLUSION:

There are a plethora of signs and symptoms but the most common is fever and lower abdominal pain. The most common bacteria was E-Coli and 32 percent of the patients there was recurrence and in the treatment Aminoglycosides Gentamicin and Amikacin are the most effective drugs.

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