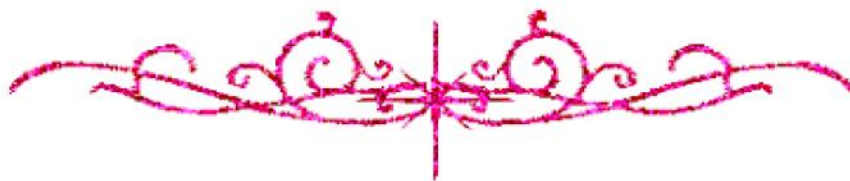


بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

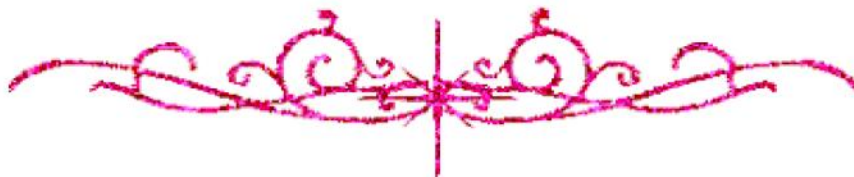
قسم

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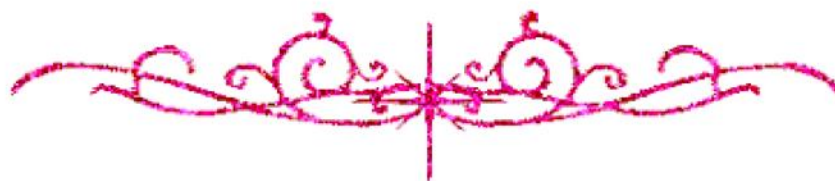


بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل



**Frequency and Antibiotic Resistance Profile
of Uropathogens Associated With Community
Acquired Urinary Tract Infections**

Thesis

Submitted for Partial Fulfillment of
Master Degree in **Clinical Pathology**

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List of Contents

Title	Page No.
List of Tables	i
List of Figures	ii
List of Abbreviations	iii
Introduction	- 1 -
Aim of the Work	3
Review of Literature	
Community Acquired Urinary Tract Infection	4
Materials and Methods.....	42
Results	49
Discussion	64
Summary	71
Conclusion	76
Recommendation.....	77
References.....	78
Appendix	95
Arabic Summary	١

List of Tables

Table No.	Title	Page No.
Table (1):	Predisposing Risk Factors for UTI	10
Table (2):	Examples of Probable Virulence Factors of Uropathogenic Escherichia coli	17
Table (3):	Resident Microbiota of the Urethra.....	19
Table (4):	Uropathogens by Type of UTIs.....	20
Table (5):	Symptoms associated with different types of UTI.	21
Table (6):	False positive and false negative results of urine dipstick test.....	23
Table (7):	Approved technologies for pathogen detection.....	30
Table (8):	Treatment of different types of UTI	35
Table (9):	Number and percentage of studied urine samples according to gender and age group.....	51
Table (10):	Prevalence of UTI in different age groups and genders....	52
Table (11):	Complicated and uncomplicated UTIs classification with respect to different organisms.....	53
Table (12):	Distribution frequency of isolated bacterial uropathogens.....	55
Table (13):	Distribution of uropathogens in relation to sex and age of patients.....	58
Table (14):	Total susceptibility pattern of microorganisms to antibiotics.....	61
Table (15):	Susceptibility rates to oral and parenteral antimicrobials of most common uropathogens isolated from the studied urine samples.	63

List of Figures

Fig. No.	Title	Page No.
Figure (1):	Urogenital system: upper versus lower tract UTI	7
Figure (2):	Risk factors for urinary tract infections	11
Figure (3):	Stages of UTI	13
Figure (4):	Pathophysiology of urinary tract infection	15
Figure (5):	Method for streaking with calibrated urine loop to produce isolated colonies and countable colony-forming units	26
Figure (6):	IVP showing the bladder and kidneys	28
Figure (7):	Overview of the clinical workflow of existing and future diagnostic technologies for UTI.....	31
Figure (8):	Female to male ratio for the occurrence of UTI	50
Figure (9):	Percentage of different isolated uropathogens.....	54
Figure (10):	Distribution of bacterial isolates from urine samples.	56
Figure (11):	Distribution of urine pathogens according to age groups and gender.	57
Figure (12):	Total susceptibility pattern of microorganisms to antibiotics.	62

List of Abbreviations

Abb.	Full term
A/S	Ampicillin-sulbactam
AIDS	Acquired immunodeficiency syndrome
AK.....	Amikacin
AMC.....	Ampicillin-clavulanic acid
AMP	Ampicillin
AST	Antimicrobial susceptibility testing
BPH	Benign prostatic hyperplasia
C. albicans	Candida albicans
C. non-albicans...	Candida non – albicans
C. urealyticum....	Corynebacterium urealyticum
CAP.....	The College of American Pathologists
CA-UTI	Community acquired urinary tract infection
CAZ.....	Ceftazidime
CIP.....	Ciprofloxacin
CLSI	Clinical Laboratory Standards Institute
CN.....	Gentamycin
CNF	Cytotoxic necrotizing factor
COT	Cotrimoxazole
CRO	Ceftriaxone
CT scan.....	Computed tomography scan
CTX.....	Cefotaxime
DDST.....	Double-Disc Synergy Test
DO.....	Doxycycline
E. coli.....	Escherichia coli

List of Abbreviations (Cont...)

Abb.	Full term
ERT.....	Ertapenem
ESBLs.....	Extended Spectrum β -lactamases
EUCAST.....	The European Committee on antimicrobial
FEP.....	Cefepime
FISH.....	Fluorescent in situ hybridization
	Flight
HIV.....	Human immunodeficiency virus
HPF.....	High power field
HS.....	Highly significant
IDSA.....	The Infectious Disease Society of America
Ig A.....	Secretory immunoglobulin A
IMP.....	Imipenem
IVP.....	Intravenous pyelogram
K.pneumoniae	Klebsiella pneumonia
LEV.....	Levofloxacin
L-UTI.....	Lower Urinary tract infection
LZD.....	Linezolid
M. morganii.....	Morganella morganii
MALDI-TOF	Matrix-assisted laser desorption ionization– time of
MEM.....	Meropenem
NIT.....	Nitrofurantoin
NOR.....	Norfloxacin
NS.....	Non significant

List of Abbreviations (Cont...)

Abb.	Full term
NSAIDs	Nonsteroidal anti-inflammatory drugs
OFX	Ofloxacin
P. aeruginosa.....	Pseudomonas aeruginosa
P. mirabilis.....	Proteus mirabilis
PCR.....	Polymerase chain reaction
PID.....	Pelvic inflammatory disease
PIT	Tazobactam- piperacillin
S.....	Significant
S. aures.....	Staphylococcus aures
S. saprophyticus.	Staphylococcus saprophyticus
SD	Standard deviation
TE	Tetracycline
UTIs	Urinary tract infections
U-UTI	Upper urinary tract infection
WBC	White blood cell

INTRODUCTION

Urinary tract infections (UTIs) are among the most common bacterial infections diagnosed in community health practice and also of the hospital settings, resulting in high rates of morbidity and high economic costs associated with its treatment (*Al-Badr et al., 2013*). The most frequent uropathogen involved in community-acquired UTI is *E. coli* (80-90%) due to the fact established being a normal flora of the human intestine and therefore easily colonizing the urinary tract (*Jean et al., 2016*). Other causative organisms are members of *Enterobacteriaceae* family and some Gram positive agents like *Staphylococcus saprophyticus* and *Enterococcus faecalis*. In the majority of infections, the etiologic agent is a single pathogen. However, multiple microbes may be responsible for the infection in some patient (*Afriyie et al., 2015*). Community-acquired UTI are mainly uncomplicated, colonizing preferably the bladder and causing cystitis. However, it may ascend through the ureters to the kidneys and cause pyelonephritis (*Chiu et al., 2016*).

Results of antimicrobial susceptibility testing are usually obtained three days after sampling. The early treatment of UTI decreases the rate of morbidity, implying that in most cases antimicrobial therapy is being prescribed empirically. The differences in gender and age must be taken into consideration at the moment of prescription of empirical antimicrobials. In order to administer an appropriate empirical therapy it is crucial to know the main bacteria usually involved in the UTI as well as their antimicrobial resistance pattern.

Many studies showed that there is a geographic variation in the causative microorganisms of UTIs and their resistance patterns to antibiotic (*Nzalie et al., 2016*). These data allow controlling the increase of antimicrobial resistance and the spread of resistant bacterial strains that represent a public health problem worldwide (*Linhares et al., 2013*). Up to date, in Ain Shams University Hospitals, no available realistic data are present to help in improving the choice.