







شبكة المعلومـــات الجامعية التوثيق الالكتروني والميكروفيا.



جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد اعدت دون آية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

40-20 في درجة حرارة من 15-20 منوية ورطوبة نسبية من

To be kept away from dust in dry cool place of 15 – 25c and relative humidity 20-40 %









Effect Of The Minimum Inhibitory
Concentration And a Concentration
Below It Of Gentamicin And Ampicillin
On Ultrastructure Of E-coli By
Electron Microscope

BIICEN

Thesis

Submitted for Partial Fulfilment of the Master Degree in Medical Microbiology & Immunology

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بسم الله الرحمن الرحيم

"سبحانات لا علم النا إلا ما علمتنا . إنك أنت

الدُيْ يَهُ ٢٣

صدق الله العظيم

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Moushira Ali

List of Abbreviations:-

1- UTIs: Urinary tract infections

2-LPS: Lipopolysaccharides.

3-EM: Electron microscope.

4-SEM: Scanning electron microscope.

5- TBRI: Theodor Bilharz Research Institute.

6-MIC: Minimum inhibitory concentration.

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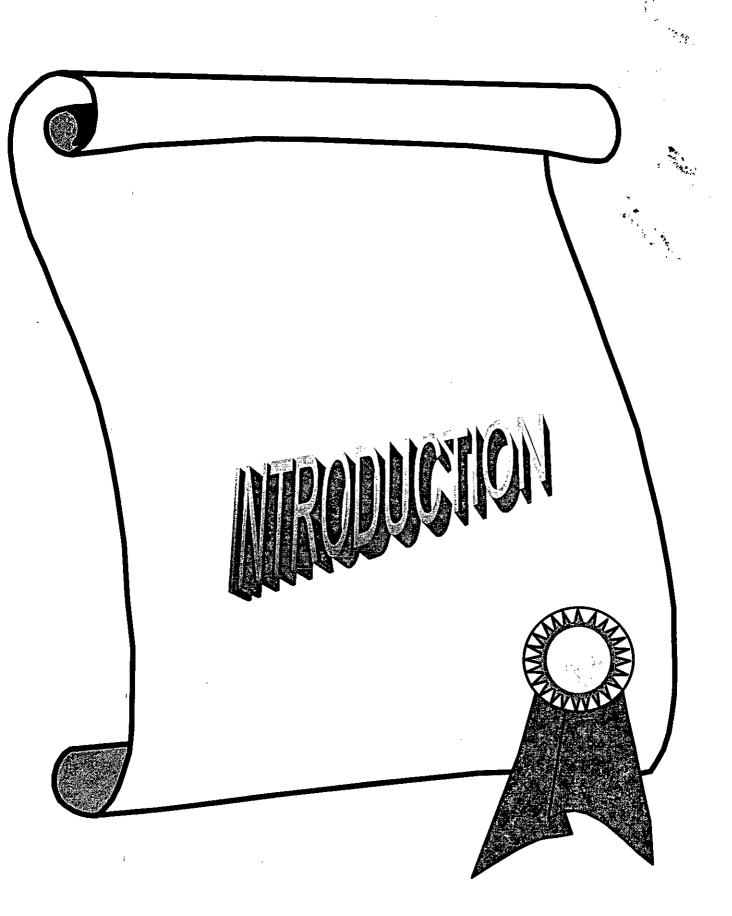
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Introduction

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Escherichia coli (E-coli) is a member of the family Enterobacteriaceae. Its natural habitat is in the intestinal tract of man and animal (Ketchum, 1984) E-coli is the most prevalent pathogen and notoriously known as the commenst cause of urinary tract infections (UTIS) (Rydberg and Helin, 1991) other diseases caused by E-coli are hospital acquired infections especially wound infections, diarrheal diseases, pneumonia, meningitis and septicemia (Joklik et al., 1992).

Due to the wide spread of pathogens amongst mankind it is essential to think about the use of antibiotics or antimicrobial agents which exhibit selective toxicity toward the parasite but much less to the host (James, J. Plorade, 1994).

Some antimicrobial agents have advantages over others, in that they are essentially non toxic to the host unless hypersenstivity has developed as penicillins (Connolly & Hammer, 1992) others have the advantage of having a much lower therapeutic index which is defined as the ratio of the dose toxic to the host relative with the effective therapeutic dose (Connolly & Hammer, 1992).

The disastrous effect met with in using antimicrobials is the development of resistance. As we found that by using most antimicrobials, resistant strains of many previously susceptible species became