# بسو الله الرحمن الرحيو

# الآية

قال تعالى:

( فِلا تَعلم نَهْس مَا أَخَفِي لَمُم مِن قِرةَ أَعُين جِزاء بِمَا كَانِهِا يعملون )

حدق الله العظيم

سورة السجدة الآية (17)

# **Dedication**

To my great and beloved parents,

Ny wonderful brothers and sisters,

Ny sincere friends

And my supporting teachers

### **Acknowledgement**

Firstly I thank Allah for blessing my life, and helped me to start this work and supported my strength to complete this humanity work.

I would like to give my great sincere thanks to my supervisor Dr. Yusuf for his constructive guidance, help and support me in each step to establish valuable and useful result.

I would like to extend special thanks to my lovely mother and gorgeous father for their kind supporting and motivating me to do my best and never complain from my needs.

I am very thankful for staff of the microbiology laboratory and Sudan University of science and technology for offering me ideal environment to perform my research project.

Also I would like to thanks to my brothers and sisters, my teachers, friends and all people support me and believe on me. Last but not the least I extend my thanks to Radiation and Isotope Center of Khartoum and medical lab staff for this opportunity to accomplish my work.

The main aim of this study was to determine the prevalence of urinary tract infection (UTI) among the chemotherapy patients in Radiation and Isotope Center of Khartoum (RICK), during the period between January and March 2014. Total of fifty (n=50) urine specimens were aseptically collected from chemotherapytic patients. Where then cultured on Cystine-Lactose Electrolyte Deficiency media (CLED) Agar, blood agar for growth of bacteria. The identification of isolated bacteria was done by colonial morphology, Gram stain and biochemical tests. The result revealed that 46% (23) out of 50 urine specimens were positive for bacterial growth and 54% (27) were negative.

The bacteria isolated were *S. aureus* (26.1%), *E.coli* (21.7%), *S. epidermidis* (17.4%), *K. pneumoniae* (13%), *p. mirabilis* (13%) and *Ps. aeruginosa* (8.7%).

It's concluded that *S. aureus* was the most common causative agent among chemotherapeutic patient.

#### المستخلص

أجريت هذه الدراسة بهدف تحديد مدى إنتشار عدوى المسالك البولية بين المرضى الخاضعين للعلاج الكيميائي في المركز القومي للعلاج بالأشعه والطب النووي (مستشفى الذره سابقا) خلال الفترة من يناير إلي مارس 2014. تم جمع 50عينه بول تحت ظروف معقمه من المرضى الخاضعين للعلاج الكيميائي. وقد زرعت عينات البول في CLED لعزل العوامل المسببة للأمراض. تم التعرف على البكتريا بواسطه الشكل المظهري وصبغه جرام والاختبارات الحيوية وأظهرت النتيجة التي تم الحصول عليها أن 46% (23) من العينات أظهرت نمو، بينما 54% (23) لم تظهر أي نمو.

وفي هذه الدراسة تم عزلت البكتريا والتعرف عليها وهي المكورات العنقودية الذهبية (17.4%)، الاشريكية القولونية بنسبة (21.7%), المكورات الجلدية (17.4%)، الكلبسيلة الرئوية (13%)، المتقلبة الاعتيادية (13%)، والزائفة الزنجارية (8.7%).

خلصت الدراسة إلى أن المكورات العنقودية هي المسبب لعدوى امجاري البولية عند المرضى السرطان الخاضعين للعلاج الكيميائي.

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