بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ (1) خَلَقَ الْإِنسَانَ مِنْ عَلَقٍ (2) اقْرَأْ وَرَبُّكَ الْأَكْرَمُ (3)
الَّذِي عَلَّمَ بِالْقَلَمِ (4) عَلَّمَ الْإِنسَانَ مَا لَمْ يَعْلَمْ (5)

صدق الله العظيم
سورة العلق الآيات 1-5

Dedication

I dedicate this work to my father, mother, brothers, sisters,
and friends with love.

ACKNOWLEDGEMENT

Thanks and praise to Allah, who gave me health, strength and patience to complete this study.

I would like to express my deep gratitude to my supervisor Professor Dr. Humodi Ahmed Saeed, for his patience, smooth guidance, serious follow up, and constructive criticism throughout the term of this study…God bless him.

Appreciation is also extended to the staff of the College of Medical Laboratories Science, with special reference to the Department of Micro-biology for their sincere effort to qualify and build high caliber graduates to satisfy the national requisite for this vital specialty.

Entry:

(I am convinced of the dangerous conditions which can be caused by the germs of microbes which are to be found everywhere, especially in hospitals)

L. Pasteur 1878

ABSTRACT

Nosocomial Multi-drug Resistant Gram-negative bacterial infections are one of serious health problems worldwide.

The objective of this study was to isolate, identify and assess nosocomial multi-drug resistant Gram-negative bacteria in infected wounds

One hundred clinical swap samples were collected from patients with infected wounds. The identification of the isolated organisms utilized cultural characteristics, Gram's stain, and biochemical tests. Antimicrobial susceptibility testing was carried out by disk diffusion method on Mueller Hinton agar medium by Kirby Bauer technique.

Out of the total number of specimens investigated, 37 of them showed no growth. 38 isolates were Gram positive cocci and 25 isolates were Gram negative bacilli.

From the 25 isolates identified as gram negative bacilli, 17 isolates were *P. aeruginosa*, 4 isolates were *E. coli*, 2 isolates were *K. pneumoniae* and 2 isolates were *P. vulgaris*. 23 isolates were sensitive to all antibiotic disks, while two isolates were multi-drug resistant.

The study concluded that *P. aeroginosae* and *E. coli* were the most common Gram- negative pathogens isolated from the nosocomial infections in wound infected patients. Further studies are needed to confirm the present results.

الخلاصه

اجريت هذه الدراسه كتقييم للمقاومه المتعدده للعقاقير للباكتيريا سالبة الجرام المسببه للعدوى لمرضى الجروح فى المستشفيات. تم تجميع مائة عينه من الجرحى من مستشفى السلاح الطبى للتعرف علي انواع الباكتيريا المعزوله و ذلك بتزريعها فى الاوساط الغذائيه المناسبه و تعريضها لصبغة جرام و للاختبارات الكيموحيويه، ثم اجراء اختبار الحساسيه للعقاقير عليها باستخدام الاقراص الدوائيه بتزريعها في وسط المولر هينتون بطريقة الكيربى بور.

سبعه و ثلاثون عينه لم تنمو فى الاوساط الغذائيه بينما نمت ثمانيه و ثلاثون عينه كباكتيريا موجبة الجرام و خمس و عشرون نمت كباكتيريا سالبة الجرام.

من الخمس و عشرين عينه التى عرفت بأنها سالبة الجرام و بعد اجراء الاختبارات الكيموحيويه عليها تم التعرف علي سبعة عشر عينه بانها سيدوموناس ايروجنوزا و علي اربعه عينات بانها اشريشيا كولاى و عينتين كليبسييلا نيمونيا و عينتين بروتيس فولجاريس.

بعد اجراء اختبار الحساسيه على الخمس و عشرين عينه سالبه الجرام تبين بأن ثلاثه و عشرين عينه حساسه للعقاقير و لم تكن ذات مقاومه تذكر، بينما تم التعرف علي عينتين بانهما ذواتى مقاومه متعدده للعقاقير، احداهما اشريشيا كولاى و الاخرى كليبسييلا نيمون

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