الآيـــة

بســم الله الرحمن الرحيـم

(وَمَآ أَرْسَلْنَاكَ إِلا رَحْمَةً لِلعَالَمِين)

صدق الله العظيم

سورة الأنبياء﴿ 107 ﴾

Dedication

To that who taught me to write the first letter of the alphabet, **My father.**

To the symbol of the absolute motherhood, the unparalleled human being,

My mother.

To my brothers and sisters.

To all my colleagues who are too numerous to mention by name, who advised, supported and encouraged me.

To my teachers

With respect and appreciation

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Thanks are indeed to **ALMIGHTY ALLAH** worth all praise, for giving me health and power to complete this work.

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Abstract

This study was conducted in order to identify the bacterial pathogens associated with diabetic wounds and determining their antibiotic susceptibility patterns. A total of 50 diabetic patients were introduced in the present study that was conducted during June - August 2012. It has been found that wounds are highly infected by aerobic and anaerobic bacterial types; Different species were isolated from infected wound swab. 7 different species were isolated from the specimens they were *staphylococcus aureus* 9 (18%), *E. coli* 8 (16%). *Pseudomonas aeroginosa* 14 (28%). *Proteus vulgaris* 7 (14%). *Streptococcus pyogenes* 4 (8%). *Klebsiella pneumonia* 4 (8%) and *Clostridium spp* 2 (4%). *Pseudomonas aeroginosa* bacteria- was a predominant pathogen in diabetic wound infections. Most isolates were found to be sensitive to most antibiotics used and their susceptibility to amino glycoside was found to be more than 60% except *Pseudomonas aeroginosa* which is resistant. Gentamycin and streptomycin were found to be the most effective antibiotics against most Gram negative and Gram positive organisms.

ملخص البحث

اجريت هذه الدراسه من اجل تحديد مسببات الامراض البكتيريه المرتبطه بجروح السكري واختبار الحساسيه للمضادات الحيويه .

50 مريضا بالسكري الذين يعانون من التهابات في الجروح ادخلوا في هذه الدراسه التي اجريت في الفتره بين يونيو.-أغسطس.2012 . تم عزل 7 أنواع مختلفة من العينات وهي المكورات العنقودية الذهبية 9 (18٪) ،الاسكرشيا القولونية 8 (16٪)الزائفة الزنجاريه 14(28٪). المتقلبة الاعتيادية 7 (14٪). العقدية المقيحة 4 (8٪). الكلبسيلة الالتهاب الرئوي4 (8٪) والمطثية 2(4٪) وقد وجد ان نسبة الاصابه البكتيريه كبيره وان الزائفه الزنجاريه البكتريا الممرضه هي السائده في التهابات جروح السكري. ووجد ان معظم العزلات حساسة لمعظم المضادات الحيوية المستخدمة وعثر قابليتها للغليكوزيدات الأمينية كانت أكثر من 60٪ باستثناء الزائفة الزنجاريه التي هي مقاومة .وقد وجد ان الجنتاميسين والستربتوميسين الأكثر فعالية ضد البكتريا الإيجابية الغرام و السلبية الغرام.

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List of abbreviations

IDDM	Insulin dependent diabetes mellitus.
NIDDM	Non insulin dependent diabetes mellitus
DM	Diabetes mellitus
GDM	Gestational diabetes mellitus
KIA	Kligler iron agar
WHO	World Health Organization
NCCLS	National culture collection laboratories