

Microbiological Study of Diabetic Foot

Thesis

Submitted for the Partial Fulfilment of the Degree of
Master in Internal Medicine

By

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"سبحانك لا علم لنا إلا ما علمتنا
إنك أنت العليم الحكيم"

صدق الله العظيم

سورة البقرة

آية (٣٢)

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List of Errata

Page	Line	Wrong	Correct
3	2	aetiologically	aetiologically
9	14	etiology	aetiology
12	6	twin	twins
16	4	debates	diabetes
25	19	(The line is repeated, please omit)	
30	13	pathogenosis	pathogenesis
30	14	blodder	bladder
30	22	creptitus	crepitus
31	18	blodder	bladder
32	3	blodder	bladder
32	9	blodder	bladder
33	9	graam	Gram
33	11	bloods tream	blood stream
34	2	stophylococcal	staphylococcal
34	8	pneumoni	pneumonia
39	19	Bheamolytic	β -haemlytic
40	3	bacter-oids	bacteroids
44	13	show	shoes
45	2	haed	head
45	4	aand	and
45	12	man	main
47	2	Angipathy	Angiopathy
52	16	less	loss
54	10	but may also be manifested by pain in the calf (please omit)	
71	11	staf	staph
72	9	if	of
76	16	alcolificanis	alcalificanis
77	22	chroramphnicol	chloramphenicol
87		accalifica	alcalificanis
99	3	cepholothine	cephalothin
102	14	kelbsiella	klebsiella

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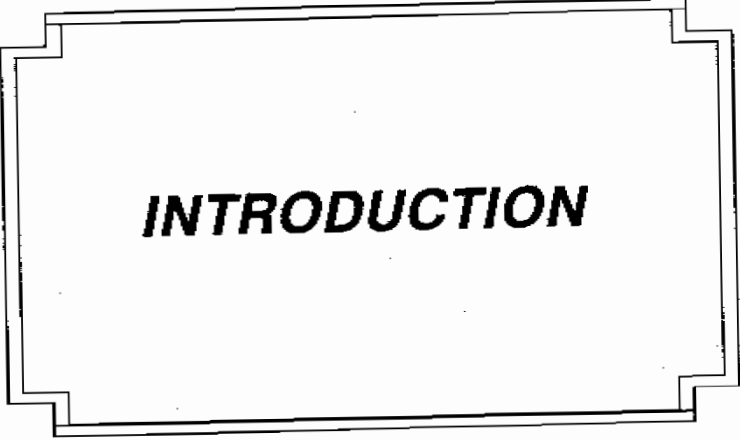
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LIST OF ABBREVIATIONS

C.T.	Computerized Tomography
E. coli	Escherichia coli
IDDM	Insulin-Dependent Diabetes Mellitus
M.R.	Magnetic Resonance
NIDDM	Non-Insulin Dependent Diabetes Mellitus
Staph.	Staphylococcus
Strept.	Streptococcus
T.B.	Tuberculosis
W.B.Cs.	White Blood Cells



INTRODUCTION

INTRODUCTION

Infection of the foot is a limb threatening condition for patients with diabetes mellitus and diabetic foot infection is the most common cause of hospital admission in diabetic patients, [Criado et al., 1992].

Angiopathy, immunopathy and neuropathy are the key components responsible for diabetic foot complications, [Ward et al., 1993], but the neuropathy is quantitatively more important because the diabetic patient with reduced pain sensation frequently exposes his feet to abnormally high temperature or pressure but feels no discomfort. There are other factors making the diabetic patient liable to infection such as defect in:

1. Humoral immunity [Joan and Casey, 1990].
2. Phagocytic function [Bagdade et al., 1978].
3. Lymphocytes.

The infection of foot may takes different grades [Bulton, 1990].

Grade O: the foot has no open lesion.

Grade I: superficial ulcer but with full thickness skin loss.

Grade II: deep ulcer and often penetrates subcutaneous fat but no abscess formation or bony infection

Grade III: deep infection with cellulitis, abscess formation or even osteomyelitis

Grade IV: there is localized gangrene.

Grade V: patient has extensive gangrene of foot

As the diabetic foot is a complicated problem. The microbial study of infection is important to deal with it. By isolation and culture of organisms there are many organisms which are responsible for infection including staphylococcus aureus, beta haemolytic streptococci, proteus, bacteroids, klebsiella and enterococci [Asfer et al., 1993]. So the using of the proper antimicrobial agents may decrease the number of patients needing amputation.

Aim of the Study:

To study the prevalence of infecting micro-organisms in diabetic foot in order to select the proper antimicrobial agent to decrease the rate of amputation.

***REVIEW OF
LITERATURE***