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# THE PREVALENCE OF CANDIDA SPECIES IN THE ORAL CAVITY OF DIABETIC PATIENTS

Thesis Submitted for the Partial Fulfillment of the Master  
Degree in Basic Medical Science (Microbiology)

By

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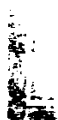
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بسم الله الرحمن الرحيم

"و اقمنا خالقنا الإنسان من سلالة من طين \*

ثم جعلناه نطفة في قرار مكين \* ثم خلقنا النطفة علقة فخلقنا

العلقة مضغة فخلقنا المضغة عظاما فكسونا العظام لحما ثم

أنشأناه خلقا آخر فبارك الله أحسن الخالقين \*

ثم إنكم بعد ذلك لمينون ".....

صدق الله العظيم

سورة المؤمنون (الآية ١٢-١٥)

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## **List of abbreviations**

AIDS:	Acquired immunodeficiency syndrome
CMCS:	Chronic mucocutaneous candidiasis syndrome
IDDM:	Insulin dependant diabetes mellitus
NIDDM:	Non-insulin dependent diabetes mellitus
C.:	Candida
CD:	Cluster of differentiation
CMI:	Cell mediated immunity
ECM:	Extracellular matrix
SCID:	Severe combined immunodeficiency
PMNs:	Polymorphonuclear leucocytes
CRP:	C-reactive protein
DM:	Diabetes mellitus
WBC:	White blood count
ESR:	Erythrocyte sedimentation rate
G.T.:	Germ tube
Ch. sp.:	Chlamydospore formation

# Introduction



## **Introduction**

*Candida albicans*, a dimorphic fungus and a member of human endogenous flora, continues to gain importance as a serious pathogen in immunosuppressed patients, notably those with diseases such as hematologic malignancies, acquired immunodeficiency syndrome (AIDS) and diabetes mellitus. In the immunocompromised host, most *Candida albicans* infection is thought to be of endogenous origin (*Brawner, 1991*).

The frequent occurrence of *Candida* infection in patients with diabetes mellitus has been recognized for many years. The predisposing effect of diabetes has been confirmed by animal experiments in which an induced diabetes state was associated with increased susceptibility to infection by pathogenic *Candida* species (*Odds et al., 1978*).

The incidence of oral carriage of candidal species in the mouths of diabetic patients compared with non-diabetic controls is not clearly defined. Some studies have reported increased rates, while others have found no significant difference. The wearing of dentures and glycaemic control are considered to be important factors which affect the rate of candidal carriage in diabetic patients, but the types of therapy to treat diabetes are not thought to have a significant role (*Fisher et al., 1987*).



# Aim of the work

