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بالرسالة صفحات
لم ترد بالأصل

DIFFUSE SINO-NASAL POLYPI

(CLINICAL AND IMMUNO-HISTOCHEMICAL STUDY)

Thesis

Submitted to the Faculty of Medicine
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By

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CONTENTS

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Dedication

To my family, who made lots of sacrifices to put me on the route of success.

INTRODUCTION

INTRODUCTION

The condition of sino-nasal polyposis has been an enigma in the recorded history of mankind.[1] This condition is probably the earliest disease for which the names of both the patient and the physician are known to us now, as its recorded history goes back for more than 4000 years in ancient Egypt, when Egyptian rhinologist, Ni-Ankh Sekhmet, treated King Sahura of the Vth dynasty from what was, most likely, nasal polyposis.[2]

Sino-nasal polyposis has been defined as a chronic inflammatory disease of the paranasal sinus mucosa with protrusion of oedematous polypi.[3]What makes this disease a one that raises much debate is that its aetiology and underlying pathogenesis are not yet fully understood.[4-6]

Diffuse sino-nasal polypi are known to develop as a result of a chronic inflammatory process, of which eosinophils form the most prominent component of the inflammatory cellular infiltrate. [7-17] The eosinophils are thought to play a key role in the patho-physiology of sino-nasal polyposis.[11,13] The precise patho-mechanism by which eosinophils act, leading to polypi formation is, however, largely unclear.[10,13]

Another unclear and very interesting point in the patho-physiology of sino-nasal polyposis is the cause of selective accumulation or recruitment of eosinophils, but not neutrophils, in the sino-nasal polypi tissue.[13,18] It is now recognised, after several studies performed in this field,[19-23] that Ig-E mediated allergy cannot be considered as an

exclusive cause of sino-nasal polyposis, and so the selective recruitment of eosinophils cannot be explained on allergic basis.

It was found that for leukocytes, including eosinophils, to emigrate from peripheral blood and infiltrate tissue, i.e. undergo extravasation, they need to pass by a multi-step process regulated by adhesion molecules. These adhesion molecules are present on the circulating leukocytes and on the vascular endothelium.[24-26] Further studies have shown that selective migration and recruitment of eosinophils might be dependant on a certain type of adhesion molecules, the Vascular Cell Adhesion Molecule (VCAM-1).[27-31] In-situ studies on sino-nasal polyposis demonstrated an up-regulation of expression of VCAM-1, and proved its role in the selective recruitment of eosinophils in this disease.[32-34] However, other results contradicted these findings.[35]

The aim of this study is to investigate the role of VCAM-1 in the selective recruitment of eosinophils in diffuse sino-nasal polyposis and in the rate of recurrence of polypi after treatment. The term "diffuse" was defined by Kennedy[36] as polypi with a degree of extension preventing the possible endoscopic determination of their site of origin, or polypi arising diffusely and bilaterally and identified to arise both inside and outside the middle meatus.

REVIEW OF LITERATURE