PREVALENCE OF TONSILLOMYCOSES IN SCHOOL-AGE CHILDREN

(A MYCO-HISTOPATHOLOGICAL STUDY)

thesis

submitted in partial fulfillment of

M.Sc. Degree in Otorhinolaryngology

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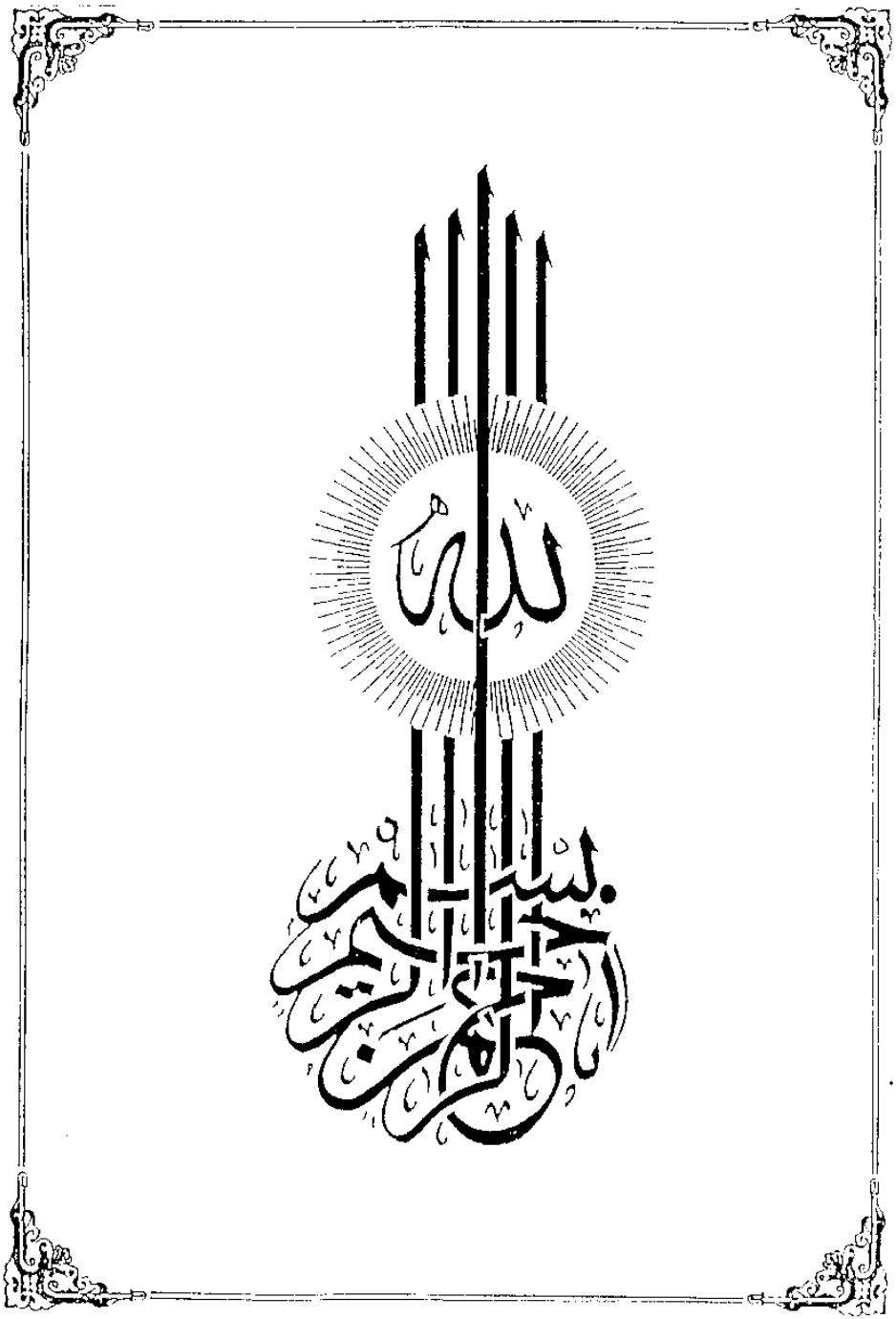

جامعة القاهرة / كلية الطب

القصر العيني

محضر

اجتماع لجنة الحكم على الرسالة المقدمة من

الطبيب / [illegible]

توطئة الحصول على درجة الماجستير / الدكتوراه

في الأنف والأذن والحنجرة

تحت عنوان: باللغة الانجليزية: Prevalence of tonsillomycoses in school age children.

باللغة العربية: [illegible] الأطفال في سن المدرسة

بناء على موافقة الجامعة بتاريخ ٢٨/ ٢ / ١٩٩٦ تم تشكيل لجنة الفحص والمناقشة للرسالة المذكورة أعلاه على النحو التالي :-

١) [illegible] من المشرفين

٢) [illegible] ممتحن داخلي

٣) [illegible] ممتحن خارجي

بعد فحص الرسالة بواسطة كل عضو منفرداً وكتابة تقارير منفردة لكل منهم انعقدت اللجنة مجتمعة في يوم الثلاثاء بتاريخ ١١/ ٣ / ١٩٩٧ بقسم الأنف والأذن والحنجرة [illegible] كلية الطب - جامعة القاهرة وذلك لمناقشة الطالب في جلسة علنية في موضوع الرسالة والنتائج التي توصل إليها وكذلك الأسس العلمية التي قام عليها البحث.

قرار اللجنة: قبول الرسالة

توقيعات أعضاء اللجنة :-

المشرف الممتحن	الممتحن الداخلي	الممتحن الخارجي
[illegible]	[illegible]	[illegible]

LIST OF ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
APCs	Antigen-Presenting cells
ASCS	Antibody-Secreting cells
BLPB	β-lactamase producing bacteria
Entero	Enterobacteriaceae sp.
GABHS	Group A beta-haemolytic streptococci
GALT	Gut associated lymphoid tissue
GC	Germinal center
GMS	Gomori's methenamine silver stain
HE	Hematoxylin and eosin stain
Hinf	Hemophilus influenzae
HIV	Human immunodeficiency virus
MALT	Mucosa associated lymphoid tissue
M cells	Membrane cells
Morax	Moraxella catarrhalis
NALT	Nasal associated lymphoid tissue
Nies	Neisseria
OTH	Obstructive tonsillar hypertrophy
Paer	Pseudomonas aeruginosa
PAS	Periodic acid-Schiff stain
PDH	Progressive disseminated histoplasmosis
PMNs	Polymorphonuclear leukocytes
PT	Palatine tonsils
RT	Recurrent tonsillitis
Saur	Staphylococcus aureus
SIgA	Secretory immunoglobulin A
SIgM	Secretory immunoglobulin M
Svir	Streptococcus viridans
Th	T helper
Ts	T suppressive

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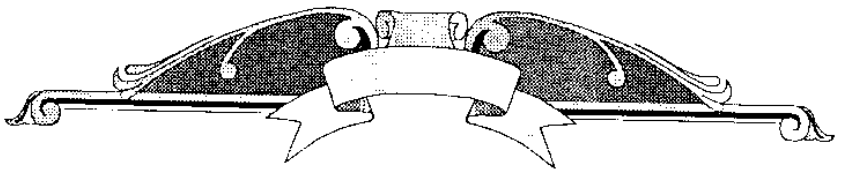

Introduction

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Approximately 11 percent of all school age children will seek medical care for pharyngitis, accounting for 5 percent of pediatric visits annually. In addition, this complaint is responsible for 40 million adult visits to a clinician. These figures all reflect many hours of lost school and work time *(Francis, 1987)*.

The tonsils and adenoids are situated at the entrance of the respiratory and alimentary tracts and represent the first site of contact with a variety of microorganisms and other antigenic substances present in food and inhaled air *(William et al., 1987)*.

The palatine tonsils are most active between the ages of 4 to 10 years with a marked decrease after the age of 20, However, other researchers are of the opinion that the palatine tonsils are in a very active state in much younger children, and even in infants who have experienced no tonsillar disease *(Stoltenberg et al., 1995)*.

The tonsils of children suffering from recurrent adenotonsillitis had an abnormal oro- and nasopharyngeal flora, which reverted to a non-pathogenic microflora after adenotonsillectomy, in the absence of surgical intervention, a complexity of factors must be responsible for the perpetuation of this abnormal bacteriology *(Sheena et al., 1981)*.

Chronic non-specific tonsillitis is a controversial condition, the organisms are usually cocci. Colonies of actinomycetes are by no means uncommon. Careful microscopic examination of sections, however, may show unequivocal superficial invasion of the tonsillar parenchyma by the mycelium (tonsillomycosis). Any of deep mycoses may involve one or both

tonsils, histoplasmosis and rhinosporidiosis being perhaps likelier than others to be found in the these sites. Rhinosporidiosis of the tonsils may cause polypoid superficial lesions or a more uniform enlargement of the affected part; the characteristic sporangia are conspicuous in histologic sections *(Friedmann, 1986)*.

Failure to achieve bactericidal level of the antibiotic inside the tonsil results in bacterial survival. It is possible that the fibrous capsule, formed at the tonsillar bed after repeated infections, serves as a barrier to antibiotic penetration, and only about ½ cm of tissue can be reached by the cryosurgical unit. So, pathogenic bacteria in deep foci within the tonsil are not affected by this method and the best treatment for these patients is by surgical extirpation *(Rosen, et al. 1977)*.

All tonsils excised ought to be submitted for histopathological investigation with modern methods employed in the study of lymphoreticular tissue in health and disease. Now that wholesale tonsillectomies are no longer performed no department of histopathology would be inundated by "normal" tonsils *(Friedmann, 1986)*.