شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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علي هذه الأفلام قد أعدت دون أية تغيرات

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في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

The role of high resolution C.T. scan Of the temporal bone in evaluating Patients with cholesteatomas

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Thesis
Submitted in partial fulfillment
For the degree of M.D (Radiodiagnosis)

By

Sherif Hamed Abou Gamrah

M.B., CH. & M.S.
Faculty of Medicine
Ain Shams University

Supervised by

Prof. Dr. Abdel Zaher Ali Hassan

Professor of Radiodiagnosis
Faculty of Medicine
Ain Shams University

Dr. Ahmed Mohamed Monib

Asst. Prof. of Radiodiagnosis
Faculty of Medicine
Ain Shams University

Dr. Hasan Ahmed Wahba

Asst. Prof. of E.N.T
Faculty of Medicine
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Sherif Abou-Gamrah

Contents

INTRODUCTION AND AIM OF THE WORK

Cholesteatoma has been recognized as a clinical entity for over 150 years (Anthony et al., 1989). Cholesteatomas consist of accumulation of desquamating keratinized Epithelium within the middle ear or other pneumatized portion of the temporal bone (Nancy et al., 1989).

The introduction of thin cuts high resolution C.T. scan has significantly changed the importance of medical imaging in the preoperative assessment of cholesteatomas (David et al., 1989).
David et al., 1989 stated that high resolution C.T. scan with its ability to produce excellent contrast and exquisite anatomic details remains the primary modality in the preoperative evaluation of middle ear cholesteatomas as it supports the surgeon with the clinical diagnosis as well as the surgical approach.

The high resolution C.T. scan with thin cuts can now documents the presence of disease in areas that are difficult to evaluate like the anterior portion of the facial canal. Its major contribution appears to be in preoperative planning and identifying lesions in unsuspected locations (Newton et al., 1989).

The high resolution C.T. scan will assist the otologist when a cholesteatomas is suspected although ear drum is intact, or where features such as sensorineural deafness suggest a more extensive disease process.

The aim of this study is to emphasize the role of the high resolution C.T. scan with thin cuts of the temporal bone and its diagnostic potentialities in patients with cholesteatomas. A details that will not only determine the type of surgical approach but also alert the surgeon to possible introperative as post operative complications. (David et al., 1989).

ANATOMY OF THE TEMPORAL BONE

The Temporal bone is divided into five parts:

1) Mastoid
2) Petrous portion
3) Squamous portion
4) Tympanic bone
5) Styloid process.

Unger et al., 1987

The petrous portion contains the middle and inner ears .It consists of a dense bony pyramid lying in the base of the skull at approximately 45 degree to the sagital plane. (Newton et al,1988).

1) EXTERNAL AUDITORY CANAL :

The external auditory canal is a tubular orifice which measures approximately 25 mm in length along its postrosuperior wall , the antroinferior wall is usually about 5-7 mm longer due to the obliquity of the tympanic membrane (Bergeron et al,1984).

There is direct contiguity of the bony canal with the mastoid cortex posteriorly and to the temporomandibular joint anteriorly. This accounts for the ear symptomatology occurring in patients with temporomandibular joint dysfunction (Dierks et al, 1991).

It consists of cartilagenous lateral portion and an osseous medial segment, the cartilagenous portion is continuous with the ear pinna, the osseous portion constitutes two thirds of the external canal