سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكروفيلم

سامية محمد مصطفى

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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بالرسالة صفحات لم ترد بالأصل

ELECTROCOCHLEOGRAPHY IN PATIENTS WITH MENIERE'S DISEASE

Thesis
Submitted for Partial Fulfillment
of the Master's Degree in
AUDIOLOGY
BY

Hoda Is-hac Abumoussa
SUPERVISED BY
Dr. Nadia Kamal
Assistant Professor of Audiology
E.N.T. Department
Faculty of Medicine
Ain Shams University

Dr. Somaia Tawfik
Assistant Professor of Audiology
E.N.T. Department
Faculty of Medicine
Ain Shams University

FACULTY OF MEDICINE
AIN SHAMS UNIVERSITY
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In 1861 Prosper Meniere published a description of the clinical entity that was soon designated "Maladie de Meniere". Meniere's great contribution to the disease that bears his name was proving that the symptoms are of labyrinthine origin and not due to brain disease as formerly thought (*Portmann*, 1980).

In 1972 the American Academy of Ophthalmology and Otolaryngology Committee on Equilibrium defined Meniere's disease as a disease of the membranous labyrinth characterized by deafness, vertigo, and usually tinnitus. The disease has as its pathologic correlate hydropic distention of the endolymphatic system (*Alford*, 1972).

Meniere's disease is not a particularly uncommon disorder. *Matsunaga* (1976), gave an

average incidence of 0.5 % for the disease in patients attending ear, nose, and throat clinics in various hospitals in different countries. *El-Gohary et al* (1992), reported that the prevalence of dizziness in patients attending the Audiology units Otolaryngology Department in Ain Shams University Hospitals was (24.6 %). In that study Meniere's disease was shown to be the cause of 27.3 % of cases with peripheral vertigo.

Although Meniere's disease is a well recognized clinical entity, an accurate diagnosis is often difficult to make and the patient is a candidate for many tests.

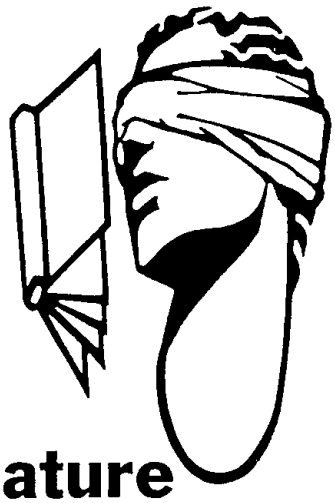
Recently electrocochleography has been reported as a way to enhance the accuracy of diagnosis in patients suspected of having Meniere's disease (*Shea and Orkik*, 1986).

Electrocochleography is a method of recording the stimulus-related electrical potentials associated with the inner ear and auditory nerve. It includes the cochlear microphonic (CM), summating potential (SP), and compound action potential (AP) of the auditory nerve (*Ruth et al*, 1988).

A number of studies have shown that patients with Meniere's disease have distinctive electrocochleographic changes, specifically with enlarged (SP) relative to the amplitude of (AP).

Glycerol which is a dehydrating agent is widely used in the diagnosis of Meniere's disease. Several authors have reported temporarily hearing improvement after its oral administration. The summating potential serves as a sensitive indicator of changes occurring within the cochlea after glycerol administration (*Goin*, 1982).

This study was designed to evaluate the electrocochleographic changes associated with Meniere's disease, and the possible effects of glycerol administration on the electrocochleographic pattern.



Review Of Literature