

CONTENTS

	Page
Introduction	1
Aim of the work	3
Review of literature	4
- Notes about the physiology of the inner ear...	4
- Effects of general anaesthesia on hearing....	19
- Changes in auditory acuity after spinal and epidural anaesthesia	28
Material and Method	38
Results	40
Discussion	53
Summary	61
References	64
Arabic summary	

ACKNOWLEDGEMENT

Praise be to (ALLAH) sovereign of the universe , and blessing and peace be upon (MOHAMED) , his kinsmen and companions all .

My deepest gratitude and invaluable thanks are due to Prof. Dr. ATEF MOHAMED ASSAL , head of E.N.T Department , Faculty of Medicine , Benha University , for his help , kindness , cooperation and valuable supervision which is the real force behind the efforts spent in this work .

I am very grateful to Dr. ENAAM FOUAD GAD ALAH , Head of Anaesthesia Department, Faculty of Medicine , Benha University for her continued concern , perceptive comments and cooperation also she spent much of her time to perform the practical work in this study and to revise the different chapters included in this work .

It is also a great honour and pleasure to me that I express my sense of gratitude to Dr. ADAL HELMY Lecturer of E.N.T. faculty of medicine , Benha University for his kind supervision precious remarks suggesting the subject and instructions during production of this work .

My profound gratitude and deep regards to Dr. BASEM FOUAD lecturer of E.N.T., Faculty of Medicine Benha University for, supervising the work and for his successful instructions .

ACKNOWLEDGEMENT

Praise be to (ALLAH) sovereign of the universe , and blessing and peace be upon (MOHAMED) , his kinsmen and companions all .

My deepest gratitude and invaluable thanks are due to Prof. Dr. ATEF MOHAMED ASSAL , head of E.N.T Department , Faculty of Medicine , Benha University , for his help , kindness , cooperation and valuable supervision which is the real force behind the efforts spent in this work .

I am very grateful to Dr. ENAAM FOUAD GAD ALAH , Head of Anaesthesia Department, Faculty of Medicine , Benha University for her continued concern , perceptive comments and cooperation also she spent much of her time to perform the practical work in this study and to revise the different chapters included in this work .

It is also a great honour and pleasure to me that I express my sense of gratitude to Dr. ADAL HELMY Lecturer of E.N.T, faculty of medicine , Benha University for his kind supervision precious remarks suggesting the subject and instructions during production of this work .

My profound gratitude and deep regards to Dr. BASEM FOUAD lecturer of E.N.T., Faculty of Medicine Benha University for, supervising the work and for his successful instructions .

INTRODUCTION

INTRODUCTION

Numerous etiologies have been proposed for sudden loss of hearing . The most often cited are viral , viral vascular , vasospasm from autonomic imbalance , intracochlear membrane breaks and vascular . Vascular etiology could be on the basis of haemorrhage , vasospasm , thrombosis or embolism. (Mattox , D.E. and Simmons , F.B. 1977) .

In many patients , however ; we cannot specifically identify the etiology and speculation and debate continue upon a viral or vascular cause .

Very little mention is made concerning sudden hearing loss related to other forms of non otologic and neurologic surgery . The relationship of sudden hearing loss to anaesthesia or surgery is mentioned as an occasional and most likely of chance coincidence . (Paperella , M.M.,1973)

Unilateral hearing loss following general anaesthesia with nitrous oxide was first described in the literature, by Matz , G.J.,Rattenborg ,C.G.and Holday , D.A. (1967).

It is known complication after otological and cardio-pulmonary bypass surgery but very uncommon in general surgical procedures on patients with no prior history of otologic disease. (Hochetman , M. and Reimet , A., 1987)