

Dedication

To the tear wipers.

To those standing against
ignorance, poverty and
sickness.

I have the honour to
dedicate this simple effort.

Acknowledgement

I would like to express my deepest feelings to all those who encouraged and directed me to the fulfillment of this task.

I conserve a special appreciation and acknowledgement to my Supervisor Dr. Shamsoun K. Kafi for the selection of this subject and his guidance, valuable advises, continuous source of information and more over patience which altogether made possible and easy what, at first, appeared to me as difficult and impossible to achieve.

I am very grateful to the Staff members of Ibn Sina Specialized Hospital, E.N.T Department & E.N.T Teaching Hospital for permitting the study to be carried.

I would like to extend my sincere thanks to all the staff members of Ibn Sina Specialized Hospital Laboratory, microbiology section particularly Miss Sarra Hassan & Miss Sulma Mohamed Ali for their assistance and supplying with reagents, culture media and other laboratory facilities.

أجريت هذه الدراسة في قسم الأنف والأذن والحنجرة بمستشفى ابن سينا التخصصي و مستشفى الأنف والأذن والحنجرة التعليمي بالخرطوم في الفترة من يناير 2002 و حتى أغسطس من نفس العام . وكانت أهدافها دراسة مسببات التهاب الأذن الخارجية والمخاطر التي تنجم من هذه الالتهابات مع تقييم بعض الفحوصات المعملية المستعملة في التشخيص .

تم فحص 148 عينة من الأذن الخارجية لـ 130 مريضاً يعانون من إفراز في الأذن الخارجية وذلك باستخدام الفحص المجهرى بالإرساء المبلل بهايديروكسيد البوتاسيوم المركز بنسبة 20% . ولطاخة ملونة بتلوين غرام والزراعة .

أوضحت الدراسة أن أكثر مسببات إفرازات الأذن الخارجية شيوعاً هو الاعتلال الجرثومي بنسبة 78%، وكان الاعتلال الجرثومي بأنواع المتقلبات بنسبة 18% وبالعزائفة الزنجارية والمكورات العنقودية الذهبية بنسبة 17% لكل. والاعتلال بأنماط الفطار الاذني بالرشاشيات السوداء بنسبة 14.3% وبالمبيضات البيض بنسبة 5.7% و بالرشاشيات من نوع تيريوس بنسبة 2% .

وضح أن أكثر الاعراض المصاحبة للتهاب الأذن الخارجية هي ألم الأذن ثم هرش الأذن ثم قلة السمع .

كانت انواع المتقلبات حساسة للجنتامايسين بنسبة 89% وحساسة للسيفترياكسون بنسبة 83% وحساسة للسبروفلوكساسين بنسبة 81% وحساسة للأوقمانتين بنسبة 78%، وكانت هذه المتقلبات أقل حساسية للأرثرومايسين والبنسلين بنسبة 34% و 9% على التوالي .

كانت المكورات العنقودية الذهبية ذات م مقاومة بنسبة 100%
للبنسلين وحساسة بنسبة 91% للأوقمانتين وبنسبة 85% للجنتاميسين
و السبروفلكساسين و السفترياكسون .
عصيات الزائفة الزنجارية كانت م مقاومة لمعظم المضادات الحيوية
ماعدا الميروبينم (حساسة بنسبة 100%)، الأميكيسين (حساسة بنسبة
95%)، السفتازيديم والجنتاميسين حساسة بنسبة 91%) .
كانت المكورات السبحية المذيبة للدم من نوع أ والمكورات السبحية
الرئوية حساسة للبنسلين بنسبة 100% .

Abstract

The study was conducted during the period from January, 2002 to August 2002 at Ibn Sina Specialized Hospital and E.N.T Teaching Hospital, Khartoum, so as to study the causes of otitis externa and Laboratory tests which was done.

A total of 148 swabs from 130 patients with external ear discharge examined by direct microscopy, of wet preparation with 20% KOH, Gram stained smear and culture technique.

The commonest causes of external ear discharge were the bacterial infections (78.0%) with the *Proteus* species (18 %), with *Pseudomonas aeruginosa* and *Staph aureus* (17%) for each. Otomycosis with *Aspergillus niger* (14.3%), with *Candida albicans* (5.7%) with *Aspergillus terreus* 2.0%.

The commonest symptoms and signs associated with otitis externa were ear ache, ear itching and diminished hearing according to the causative organism.

The isolates of *Proteus* species were 89% sensitive to Gentamicin, 83% sensitive to Ceftriaxone, 81% sensitive to Ciprofloxacin, 78% sensitive to Augmentin but less sensitive to Erythromycin and Penicillin (sensitivity 34% and 9% respectively).

The isolates of *staphylococcus aureus* were 100% resistant to penicillin, 91% sensitive to Augmentin, 85% Sensitive to Gentamicin, Ciprofloxacin and Ceftriaxone.

Pseudomonas aeruginosa was found to be resistant to most antibiotics except Meropenem sensitivity 100%)., Amikacin, sensitivity (95%), Ceftazidime and Gentamicin sensitivity (91%).

The streptococcus group (*Beta haemolytic strepto-occi group A* and *Strepto-coccus pneumoniae*) were 100% sensitive to Penicillin.

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