

الآية

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قال تعالى:

وَعَلَّمَ آدَمَ الْأَسْمَاءَ كُلَّهَا ثُمَّ عَرَضَهُمْ عَلَى الْمَلَائِكَةِ فَقَالَ أَنْبِئُونِي بِأَسْمَاءِ هَؤُلَاءِ إِنْ كُنْتُمْ صَادِقِينَ (٣١) قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ (٣٢)

سورة البقرة

الآية (٣١ - ٣٢)

DEDICATION

To my extended family and friends

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First of all thanks to Almighty Allah for giving me strength to complete this work. Great thanks to my supervisor **Prof. Humodi Ahmed Saeed** for his guidance, support and patience. Also I thank **Dr. Elhag Mansour** for his help and fruitful advice. Thanks to all my friends for their encouragement during preparation of this dissertation.

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ABSTRACT

In recent years the antimicrobial resistance increases and this results in increase rate of infectious diseases. The objective of this study was to assess antimicrobial resistance in patients with pneumococcal infection.

Sputum and CSF specimens were collected from patients suspected to have pneumococcal infections. The patients attended to Omdurman Pediatrics Emergency Hospital, Al-sh'ab Hospital, Military Hospital and Gaafer Ebn Awf Hospital.

The specimens were cultured on blood agar and chocolate agar for primary isolation of the causative agent. The identification of the isolated bacteria was done by colonial morphology, Gram's stain and biochemical tests. Antimicrobial resistance was assessed for isolate by modified Kirby-Bauer disk diffusion method.

The results revealed that *S. pneumoniae* was isolated from 27 (10.8%) out of 250 specimens. The rate of resistance among *S. pneumoniae* was 40.7% to penicillin followed by tetracycline, 18.5%; ciprofloxacin, 14.8%; erythromycin, 14.8% and chloramphenicol, 11.1%.

The study was conducted that the resistance of *S. pneumoniae* for penicillin is too high and the chloramphenicol is effective to most pneumococcal isolates. Further studies are required to validate these results.

المستخلص

اجريت الدراسة في ولاية الخرطوم في الفترة ما بين مايو واغسطس لاشخاص محتمل اصابته ب لالتهاب الرئوى وتبعاً لاعراض المرض جمعت 250 عينة من اماكن مختلفة وكانت العينات تفاف , سائل النخاع الشوكي , صديد من العين من مستشفيات مختلفة شملت مستشفى الاطفال امدرمان , المستشفى العسكري ,مستشفى الشعب و مستشفى جعفر بن عوف. استزرعت العينات في وسط الدم المغدى ووسط الشكولاتة ومن ثم تم التعرف علي مسببات المرض اعتمادا علي الشكل الظاهري , صبغة الغرام والاختبارات الكيموحيائية . ومن ثم اختبار حساسية البكتريا للمضادات الحيوية.

اظهرت الدراسة عزل 27 (10.8%) نوع من البكتريا السبحية الرئوية . ومن ثم تم اختبار حساسية المضادات الحيوية . أظهرت النتائج أن معدل مقاومة السبحية بصورة عامة للمضادات الحيوية كالآتي:

البنسلين (40.9%), التتراسايكلين (18.5%), السبروفلوكساسيين (14.8%), الأريثرومايسين (14.8%) والكلورامفينيكول (11.1%).

وبناء على هذه النتائج تبين أن هناك ارتفاع في نسبة مقاومة السبحية الرئوية للبنسلين وأن الكلوروامفينيكول هو العلاج الأمثل لها.

هناك حاجة ماسة لمزيد من الدراسة للتحقق من هذه النتائج .

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