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Identification of the Bacterial Meningitis agents in Children with Febrile

Seizure

Mohammad Mehdi Attarpour Yazdi1*

1. Department of Microbiology, Faculty of Medicine, Shahed University, Tehran, Iran.

mmayazdi@yahoo.com

Abstract

Introduction: About 1 to 5 percent of children with febrile seizures have central nervous system infection with meningitis, so the first step in these patients is to make the necessary assessments to diagnose meningitis And then identification and detection the causative agents of this disease through cerebrospinal fluid (CSF) cultures obtained through lumbar puncture. Bacterial meningitis is one of the most serious infections and should be treated as emergency. As it has significant morbidity and

mortality throughout the world, every country should have precise information regarding the etiological agents of disease and populations at risk to design public health prevention strategy. The aim of this study was therefore identification of the bacterial meningitis agents in Children with Febrile Seizure.

Methods: This research is a retrospective descriptive cross-sectional study. Cerebrospinal fluid were collected from 182 pediatric patients at the age of 5 months to 6 years old with Febrile Seizure and suspected meningitis, 114 of which were confirmed by biochemical, microbiological and molecular tests as bacterial meningitis.

Results: All children with bacterial meningitis were under 18 months of age and all presented with the first febrile seizure**.** 52.3% of the seizures were complex. According to the 2-Chi test, there was a significant relationship between the type of seizure and the prevalence of meningitis and the type of seizure and the prevalence of bacterial meningitis in children with febrile Seizure (P value <0.05). 52% of gram positive bacteria and 48% of gram negative bacteria were isolated. The most common bacteria isolated were: Streptococcus pneumoniae 28%, Staphylococcus aureus 12.5%, Escherichia coli 9%, and Neisseria meningitidis8% and Pseudomonas aeruginosa6.5%