Title:

First report of a case of pneumococcal meningitis which did not respond to the ceftriaxone therapy, despite the isolated organism was sensitive to this antibiotic in-vitro.

Authors: Maryam Mojtabavi, Hamid Reza Naderi, Ashraf Tavanaee Sani, Mahmood Bagheri, Kiarash Ghazvini *(Corresponding author)*
Mashhad University of Medical Science

Abstract

A 60 years old man presented with pneumococcal meningitis which did not respond to the ceftriaxone therapy, in spite of in-vitro susceptibility (*minimal inhibitory concentration of 0.016 µg/dLit*) of the isolated organism to this antibacterial agent, although ceftriaxone is still the drug of choice for such pneumococcal meningitis. Review of published articles revealed no report of clinical resistance in organisms which was susceptible to the same antimicrobial agent in-vitro. This alarming emergence of isolates with in-vivo resistance should be considered, and even could lead to shift in the empirical antibiotic therapy for pneumococcal infections.

Case Presentation

A 60 years old man presented to the emergency department of Quaem hospital, a university hospital in Mashhad, north-east of Iran, with seizures. The seizure occurred few hours before presentation and was associated with altered mental status and fever, and a prodrome of headache. He had a history of epilepsy which began after a head trauma and fracture of skull in about 20 years ago. Seizures had been controlled with antiepileptic drugs and the therapy was discontinued few years later.

At the time of presentation, the level of consciousness was decreased (Glasgow Coma Score of 7) and he had apparent neck stiffness accompanied by Kerning's and Broadzinsky's sign on physical examination. The patient was febrile at the time of examination (oral temperature of 39 ℃) and other vital signs were as followed: systolic blood pressure of 160 mmHg, diastolic blood pressure of 90 mmHg, heart rate of 110 beats per minute, and the respiratory rate was 16 per minute. The central and peripheral nervous systems were evaluated completely and no alteration or deficit was detected. There was no abnormal finding on assessment of the other organs.