Haemophilus influenzae Severe Infection in Pediatric Intensive Care Unit

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Background / aims:

Haemophilus influenzae colonizes the human respiratory tract and is transmitted from person to person via airborne droplets and direct contact with respiratory secretions.

The infection through *Haemophilus influenzae* is endemic and produces a wide spectrum of clinical manifestations, being meningitis the most common of all, however, it has decreased significantly with vaccination.

Bacterial meningitis is a medical emergency, and immediate diagnostic steps must be taken to establish the specific cause so that appropriate antimicrobial therapy can be initiated. The mortality rate of untreated bacterial meningitis approaches 100 percent and, even with optimal therapy, morbidity and mortality may occur. Neurologic sequelae are common among survivors.

The objective of this study is to report the case of *H. influenzae* in the HMVSC – HIAE (SP, BR) to alert the importance of the etiological diagnosis, as well as to review the multiple complications of this infection.

Method: Case report

Results:

Male patient, 4 months old, previously healthy and vaccinated against haemophilus influenza, with fever and no other symptoms. Cerebrospinal fluid analysis detected hypoglycaemia, high proteins with latex and culture positive for *H. influenzae* type B.

The patient has evolved with hemodynamic instability, was intubated and received vasoactive drugs and ceftriaxone as treatment therapy. He presented status epilepticus and persistence of fever despite the use of adequate antibiotic therapy.

Brain MRI evidencing bilateral extra-axial collections with heterogenous signal, possibly related to purulent content in the hemispherical convexities. Surgical treatment was indicated for drainage, performed without complications.

After procedure the patient received 5 weeks of ceftriaxone treatment with progressive improvement, weaning of anticonvulsants drugs and was discharged without neurological sequelae.

Conclusion:

Severe *Haemophilus influenzae* infections have decreased with routine vaccination, but they remain to be a likely cause of meningitis in childhood. Therefore, the collection of cerebrospinal fluid in the investigation of fever pictures with no signs for the diagnosis of meningitis and its etiology helps in the therapy and in the monitoring of the complications related to this agent.

Bibliography:

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Bilateral extra-axial collections with heterogeneous signal, possibly related to purulent content in the hemispherical convexities, associated with leptomeningeal concordance areas.