

Tuberculous meningitis

Tuberculous [meningitis](#) is also known as TB meningitis or tubercular meningitis.

Tuberculous meningitis is a [Mycobacterium tuberculosis infection](#) of the [meninges](#).

It is the most common form of CNS [tuberculosis](#).

Diagnosis

Li et al., collected lumbar and ventricular [cerebrospinal fluid](#) and [serum](#) from 40 children treated for tuberculous meningitis and measured the concentrations of [gelatinases](#) and their inhibitors. The concentrations of [matrix metalloproteinase 9](#) (MMP-9), MMP-2, tissue inhibitor of metalloproteinase 1 (TIMP-1), and TIMP-2 were significantly elevated in the lumbar CSF samples, and we found interesting dynamics for MMP-9 that offer novel insight into its role in pediatric patients with tuberculous meningitis ¹⁾

Complications

see [Tuberculous meningitis hydrocephalus](#).

Case reports

An [HIV](#)-positive mother infected her daughter with extensively drug-resistant [Mycobacterium tuberculosis](#). Despite adhering to the then current guidelines for prevention, the infant was diagnosed with extensively drug-resistant pulmonary tuberculosis at the age of 4 months and developed tuberculous meningitis. After a short delay, appropriate treatment was initiated, followed by an inhospital stay at a specialised hospital. The infant became generally well, but had delayed neurological development. Secondary hydrocephalus due to tuberculous meningitis required a ventriculoperitoneal shunt. After 2 years of microbiologically and clinically effective tuberculosis treatment and several shunt complications, the HIV-negative child died at the age of 28 months – with radiological signs of a shunt infection. The reason for the fatal outcome was probably related to inadequate risk reduction of airborne mother-to-child transmission, inappropriate chemoprophylaxis and delayed initiation of adequate treatment ²⁾.

¹⁾

Li YJ, Wilkinson KA, Wilkinson RJ, Figaji AA, Rohlwink UK. Elevated Matrix Metalloproteinase Concentrations Offer Novel Insight Into Their Role in Pediatric Tuberculous Meningitis. J Pediatric Infect Dis Soc. 2019 Feb 12. doi: 10.1093/jpids/piy141. [Epub ahead of print] PubMed PMID: 30753686.

²⁾

Gigi RMS, Rieder HL, Padayatchi N. When to start treatment? Dilemma illustrated by a paediatric case of extensively drug-resistant tuberculosis of the central nervous system. S Afr Med J. 2020;110(9):846-849. Published 2020 Aug 31. doi:10.7196/SAMJ.2020.v110i9.14567

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