Recurrent bacterial meningitis – case series

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Background and aims: Recurrent bacterial meningitis (RBM) is an unusual entity and generally poses a considerable diagnostic challenge. Different conditions can predispose for recurrence of episodes and the isolated pathogen can guide the diagnosis. The aim of this study was to characterize all RBM admitted to our tertiary paediatric hospital.

Methods: Retrospective analyses of the medical records of all children with RBM, between January 1994 and December 2007 (14 years).

Results: During this period 107 children with bacterial meningitis (BM) were admitted. Among those, 10 (9.3%) had more than 1 episode of BM; 6 were male. Six children had the first episode of BM in first 6 months of age (range: 7 days-12 years). Twenty three episodes of BM were identified (7 had 2 episodes and 3 had 3 episodes). *N. meningitis* and *S. pneumoniae* were isolated in 4 episodes each and *Enterococcus faecium* in 2. Underlying conditions were identified in 9 cases: neurosurgery shunt implantation (6) and CSF leakage in 3 (skull fractures). A predisposing condition hasn't yet been identified in 1 child and no immunodeficiency was found.

Conclusions: It was identified a high proportion of BRM. An anatomical defect was the most frequent cause. In cases without an obvious predisposing condition an exhaustive evaluation, including search for anatomical and immunological defects, needs to be performed in order to prevent recurrence and improve the outcome.

Key Words: recurrent bacterial meningitis, predisposing condition