A case of relapsed bacterial meningitis in a patient with aberrant patent foramen caecum

Bacterial meningitis is a serious life-threatening condition. Recurrent meningitis is defined as two independent episodes of meningitis that are separated by a period of convalescence and full recovery. Therefore, true recurrence results from a re-infection with the same or a different bacterial organism. In contrast, recrudescence and relapsed meningitis (RBM) represent the persistence of the initial infection resulting from treatment failure. Both are uncommon and could be due to anatomic anomalies of the skull, traumatic head injury with secondary CSF fistula, complement deficiency, or spread from a para meningeal infection.

We present a case of a 13-year-old healthy adolescent boy with no significant past medical history, who presented with flu-like symptoms and altered mental status. His workup showed Streptococcus pneumoniae meningitis. While receiving IV treatment, on day 7 the patient became symptomatic again with fever, vomiting, and prostration. Repeat blood tests showed an increase in total white cell count, neutrophils, and inflammatory markers. In order to determine the underlying pathology, a repeat CT scan of head followed by an MRI was done that showed an aberrant patent foramen caecum, which appeared to be the most likely cause of the relapse.

This case report illustrates the importance of a search for an anatomical abnormality to be a cause of RBM, even in an adolescent.