

Pseudotumor Cerebri: Idiopathic Disease or a Complication of Surgery?

Daniel Gaudin MD, PhD; Ahmed Alnemari; Tarek R Mansour; Mark Buehler MD [Institution]

Click To Add Logo

Introduction

Pseudotumor cerebri patients exhibit clear clinical signs and symptoms of higher intracranial pressure (ICP) without ventricular enlargement or mass lesions[1]. There is some evidence that Chairi I malformation and psuedotumor cerebri may coexist. Johnston et al found that 6% of adults having pseudotumor cerebri also have Chiari I[2]. This is eight times higher than the occurence of Chiari I in the general population. Banik et al retrospectively found that up to 24% of pseudotumor patients may demonstrate radiographic evidence of Chiari I[3]. However, an accurate reasoning for why this occurs has yet to be proven.

Chiari I is classified as a disorder of the paraxial mesoderm with hindbrain mal-development and a small posterior fossa volume. Pseudotumor cerebri has evidence of higher brain parenchymal edema and an altered CSF absorption[1, 4]. This result of a disorder intracranial compliance. It is assumed that patients with coexistence of both of these syndromes may only have temporary relief after Chiari decompression. This decompression may slightly change intracranial compliance. If an underlying psuedotumor cerebri is left untreated, it is possible for

Results

This report suggests a possible association between pseudotumor cerebri and Chiari I malformation.

Conclusions

We Provide evidence that psuedotumor cerebri and Chiari I malformation may coexist. It is assumed that patients with coexistence of both of these syndromes may only have temporary relief after Chiari decompression

Learning Objectives

- 1. Define psuedotumor cerebri disease.
- 2. Define Chiari I malformation disease
- 3. Discuss the association between the psuedotumor cerebri and Chiari I malformation.

References

- 1.Johnston, I., et al., The pseudotumor syndrome: disorders of cerebrospinal fluid circulation causing intracranial hypertension without ventriculomegaly. Archives of neurology, 1991. 48(7): p. 740-747.
- 2.Sinclair, N., N. Assaad, and I. Johnston, Pseudotumour cerebri occurring in association with the Chiari malformation. Journal of clinical neuroscience, 2002. 9(1): p. 99-101.
- 3.Banik, R., D. Lin, and N.R. Miller, Prevalence of Chiari I malformation and cerebellar ectopia in patients with pseudotumor cerebri. Journal of the neurological sciences, 2006. 247(1): p. 71-75.
- 4.Bejjani, G.K., Association of the adult Chiari malformation and idiopathic intracranial hypertension: more than a coincidence. Medical hypotheses, 2003. 60(6): p. 859-863.