

MEETING ABSTRACT

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EHMTI-0383. Spontaneous intracranial hypotension due to calcified micro-spurs perforating the dura – a case series

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Introduction

Spontaneous intracranial hypotension (SIH) is a rare but increasingly diagnosed condition. Low cerebrospinal fluid (CSF) pressure due to a dural leakage causes orthostatic headache. The nature, etiology, and location of the CSF leak itself are currently unknown and are thought to be spontaneous or idiopathic in most cases.

Aim

We present a case series with proven CSF leaks in which a systematic and meticulous search revealed dura-perforating micro-spurs as a cause of SIH.

Methods

A consecutive series of patients with symptoms of intracranial hypotension were evaluated for a systematic diagnostic work-up from February to August 2013. We performed a spine focused, stepwise escalating imaging set. If a CSF leak could be restricted, we performed microsurgical exploration under intraoperative electrophysiological monitoring of the presumed site of the CSF-leak.

Results

We identified 6 patients with SIH and imaging signs of spinal dural perforation. In 5 cases a calcified micro-spur extruding out of the disc space was identified perforated the dura and arachnoid and was the cause of CSF leak in all 5 cases. In one case a broad osteophyte had ripped the dura. All 5 micro spurs and one osteophyte were micro-surgically removed, the dura was sealed, and the CSF leak ceased immediately.

Conclusions

The etiology of the CSF leak in SIH remains obscure. Here we present 6 patients in which a systematic spinal work-up, including microsurgical exploration, revealed dura perforating micro spurs. The dura-perforating micro spurs were a frequent, definitive, and readily treatable cause of SIH.

No conflict of interest.

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