MEETING ABSTRACT

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EHMTI-0386. Chronic subdural hematoma and spinal cerebrospinal fluid leak and in non-geriatric patients

J Beck^{1*}, CT Ulrich¹, J Gralla², J Fichtner¹, C Fung¹, W Z'Graggen², A Raabe¹

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Introduction

The etiology of chronic subdural hematoma (cSDH) in non-geriatric patients (≤60 years) often remains unclear.

Aim

The primary objective of this study was to identify spinal cerebrospinal fluid (CSF) leaks in non-geriatric patients with the hypothesis that spinal CSF leaks are causally related to cSDH.

Methods

All consecutive patients ≤ 60 years who were operated upon for cSDH from Sept. 2009 to April 2011 were included in this prospective cohort study. The patient workup included an extended search for a spinal CSF leak using a systematic algorithm: magnetic resonance (MR) imaging of the spinal axis with or without intrathecal contrast application, myelography/fluoroscopy, and postmyelography CT scanning. Spinal pathologies were classified according to direct proof of CSF outflow from intrato extrathecal space, presence of extrathecal fluid accumulation, presence of spinal meningeal cysts, or no pathological findings.

Results

Twenty-seven patients (mean age±SD: 49.6±9.2 years) were operated upon for cSDH. The chief complaint was headache in 15 (56%) patients. Hematomas were unilateral in 20 and bilateral in seven. In seven of 27 patients (25.9%) spinal CSF leakage was proven, in nine (33.3%) patients spinal meningeal cysts in the cervico-thoracic region were found, and three (11.1%) had spinal cysts in the sacral

region. The remaining eight (29.6%) patients showed no pathological findings.

Conclusions

Spinal imaging results are challenging the pathogenetic concept of cSDH in young patients. The direct proof of spinal CSF leakage in 25.9% of patients suggests that spinal CSF leaks may be a frequent cause of non-geriatric cSDH.

No conflict of interest.

Authors' details

¹Neurosurgery, Inselspital, Bern, Switzerland. ²Neuroradiology, Inselspital, Bern, Switzerland.

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¹Neurosurgery, Inselspital, Bern, Switzerland Full list of author information is available at the end of the article

