Spontaneous intracranial hypotension

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A 55-old-female was admitted to the Department of Neurology because of diffuse headache, tinnitus in the right ear, stiff neck and vomiting, persisting for one month with various intensity. Magnetic resonance imaging (MRI) of the brain showed a smooth uniform pachymeningeal uptake of contrast (Fig. 1) and subdural collection of fluid (Fig. 2). Cerebrospinal fluid (CSF) analysis showed mild lymphocytic pleocytosis (34/3) and elevated protein level (1.44 g/L). Based on the results of these findings, the diagnosis of spontaneous intracranial hypotension (SIH) was established. The incidence of SIH is about 5 per 100,000 population. This syndrome is a result of CSF leakage due to a tear in the dura, most frequently where spinal roots leave the subarachnoid space. Even trivial trauma of the cer-

Fig. 1. Axial contrast enhanced T1-weighted MRI shows diffuse bilateral meningeal enhancement.

Fig. 2. Axial FLAIR MRI shows mild diffuse bilateral thin layer of subdural effusion.
vical spine may precipitate intracranial hypoten-
sion. If this does not heal with bed rest, an epidural
blood patch or percutaneous injection of fibrin
glue may be applied. Our patient was treated con-
servatively and there was complete regression of
clinical symptoms and improvement of MRI find-
ings after 4 months (Figs. 3 and 4). Since the intro-
duction of MRI in the diagnostics of headache, SIH
has been increasingly diagnosed as an uncommon
cause of headache.

Key words: intracranial hypotension – diagnosis, magnetic resonance imaging, headache – etiology

Fig. 3. Control axial contrast enhanced T1-weighted
MRI shows normal findings.

Fig. 4. Control axial FLAIR MRI shows normal
findings.

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