Spontaneous Intracranial Hypotension and a successful epidural blood patch: Case Report

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Introduction

Spontaneous Intracranial Hypotension is secondary to a loss of cerebrospinal fluid (CSF) volume which, in turn, is usually caused by spontaneous CSF leaks¹. Although this uncommon entity has a common presentation, its diagnosis, evaluation and treatment² are challenging.

Case report

- A 39-year-old woman developed orthostatic headaches, pain in the posterior triangle of the neck and shoulders, as well as nausea and vomiting, without focal signal abnormalities;
- Her medical history includes hypothyroidism and two epidural anaesthetics prior to caesarean sections (2008 and 2015);
- Pain treatment consisting of conservative measures, bed rest, 500/50mg of paracetamol/caffeine 8/8 hours, 250mg of naproxen 12/12 hours and 4mg of thiocolchicoside 8/8 hours was ineffective and meningitis was ruled out after a lumbar puncture;
- A head MRI with intravenous injection of paramagnetic contrast material showed bilateral frontoparietal dural signal enforcement correlated with CSF hypotension. **A spine CT scan combined with a myelography showed a meningeal leaking at the level of D3;**

- With anesthesia's collaboration, neurosurgery decided the epidural blood patch would be performed in the OR under aseptic technique and with radiologic guidance to identify the space between D6-D7. An epidural space puncture was performed with a G18 Tuohy needle, with loss of resistance at 4,5cm and 18ml of homologous blood were injected epidurally;
- The patient had an uneventful recovery and was discharged one week later without any symptoms.

Discussion

The anatomy of a spontaneous CSF leak is frequently complex. CT myelography is the study of choice¹ to locate the site of the leak and an epidural blood patch is the main and most effective treatment.

References:

1. Mokri Bahram, MD, FAAN, Spontaneous intracranial hypotension. American Academy of Neurology 2015; 21(4): 1086-1108.
2. Maurya VK, Ravikumar BR, Intracranial hypotension: an uncommon entity with common presentation. Med J Armed Forces India 2017.