CC106. Cough headache secondary to spontaneous occult fistula

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Objective

To describe the case of a patient who developed cough headache secondary to an occult thoracolumbar fistula, with an excellent response after the blood patch.

Case description

Patient male 56-year-old. Without relevant medical history, denies recent trauma or surgery. Onset four months ago with throbbing headache, bilateral, with moderate intensity (7/10), which is triggered after coughing, sneezing or with postural changes, not accompanied by nausea, vomiting, photophobia or sonophobia, it is of daily frequency, each episode lasts approximately 1 to 3 minutes. He received therapeutic trials with NSAIDs and triptans for 2 months without improvement, being subsequently medicated with acetazolamide and indomethacin for 1 month due to probable primary cough headache, without obtaining headache relief. He was hospitalized, on admission the neurological examination was normal. Brain magnetic resonance imaging (MRI) with angioresonance showed no alterations. Lumbar puncture revealed an opening pressure of 12 cmH2O with normal cytochemical and negative microbiological tests. An extensive study with radioisotope cisternography by intrathecal administration of Tc99m-DTPA showed slow ascent of the tracer through the lumbar and lower dorsal subarachnoid space without visualization of basal cisterns, with signs of paraspinal extravasation of cerebrospinal fluid (CSF) at the lumbar and dorsal levels (Fig. 1), findings suggestive of CSF leakage at the thoracolumbar level, not being possible to identify the fistulous tract by MRI of the dorsolumbar spine. Epidural administration of autologous venous blood was performed, without complications. After the procedure, the patient presented a favorable evolution with cessation of headache, without recurrence in the 9-month follow-up.

Conclusions

Cough headache is a widely described, rare condition. It is characteristically triggered by a rapid rise in intra-abdominal pressure that occurs with coughing, sneezing, or straining. Secondary cough headache comprises about 40% of cough headaches and is associated with a wide variety of aetiologies, including spontaneous intracranial hypotension due to CSF leak. Neuroimaging is important to identify intracranial lesions, in doubtful cases radioisotopic cisternography plays an important role in identifying CSF leak. Treatment is usually conservative, in disabling conditions epidural injection of autologous blood (blood patch) has a high response rate.



Fig 1. Radioisotopic cisternography. (A, B) Anterior and posterior projection image taken 2 hours after tracer injection, showing several foci of paraspinal activity, absence of visualization of basal cisterns. Early urinary activity. C) Image in anterior, posterior and lateral projection made at 24 hours, showing very low cranial activity, suggestive of CSF leak.