




Spontaneous pneumorrhachia: a rare cause of thunderclap headache

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Objective

To present a rare cause of thunderclap headache

Case presentation

Female patient, 39 years old, was admitted to the emergency department of a private hospital in the city of São Paulo, after a sudden and explosive headache followed by two episodes of syncope and motor deficit in the left upper limb. Neurological examination showed weakness of the left upper limb without sensitive impairment. She had previous history of bipolar affective disorder, chronic anemia, and overweight with previous bariatric surgery.

The patient was submitted to computed tomography (CT), arterial angiogram of the skull and cervical neck, which showed rare small gaseous foci in the perivertebral soft tissues and extradural site on the left side in the craniovertebral transition, near the foramen magnum. Small foci of pneumocephalus were found in the posterior fossa, near the left sphenopetrous fissure. Electroneuromyography (ENMG) of four limbs and brain and cervical magnetic resonance imaging (MRI) were performed 48 hours after initial CT scan. ENMG was normal and MRI showed no more expression of the changes described on CT. She was treated with analgesia and was discharged with full reversion of initial symptoms.

Conclusion

Spontaneous pneumorrhachia is rare disease and is characterized by the presence of air in the spinal canal, both in the intradural and extradural compartments. It is usually benign with spontaneous resolution. Our patient was included in a stroke investigation protocol, due to the thunderclap headache and focal motor deficit. CT revealed the diagnosis. The cervical CT that was performed in the context of cervical CT angiography of the stroke protocol allowed the correct diagnosis.

Keywords: Thunderclap headache, Spontaneous pneumorrhachia, Cervical computed tomography angiography.