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A case of unilateral headache and lower cranial nerve palsy

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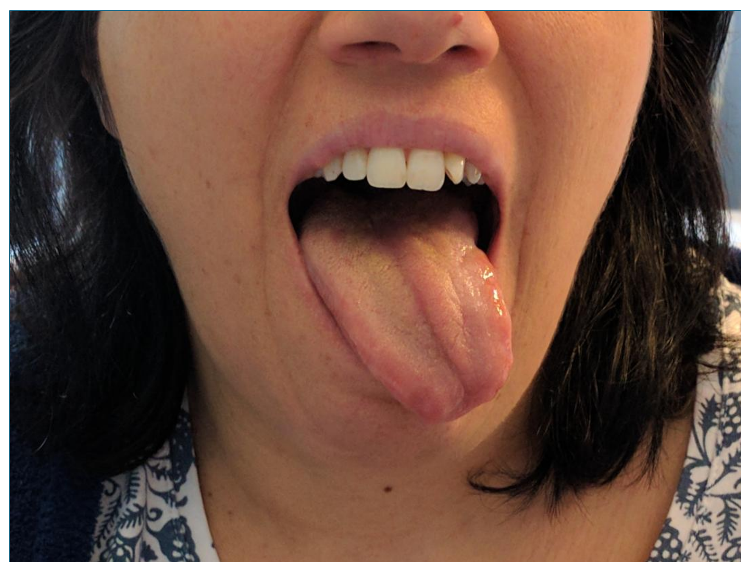
INTRODUCTION

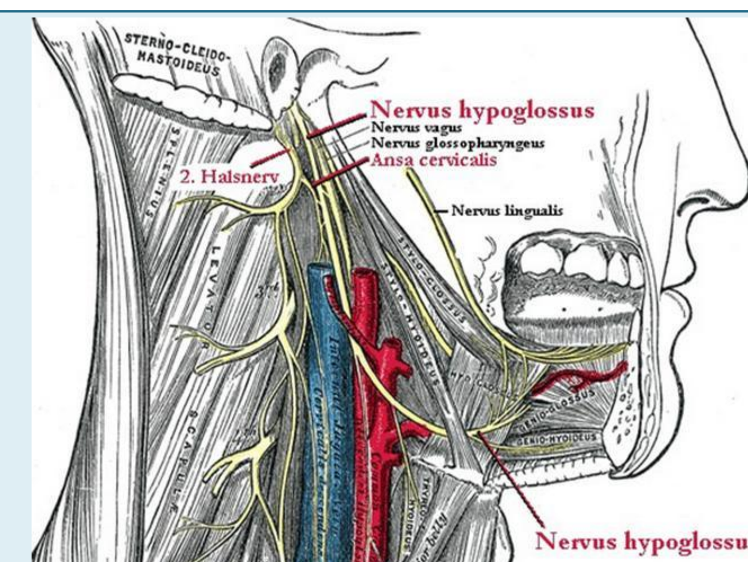
Headache and pain in the neck can be caused by a variety of diseases, from flu, muscle contractions to tumors and vascular diseases. Nevertheless, when they are associated or followed by focal deficits, they can be the warning symptoms of a cervical carotid and/or vertebral artery dissection. Here we describe a case of originally isolated headache, followed by neck pain, Horner syndrome and lower nerves palsy due to cervical vessels dissection.

CLINICAL CASE

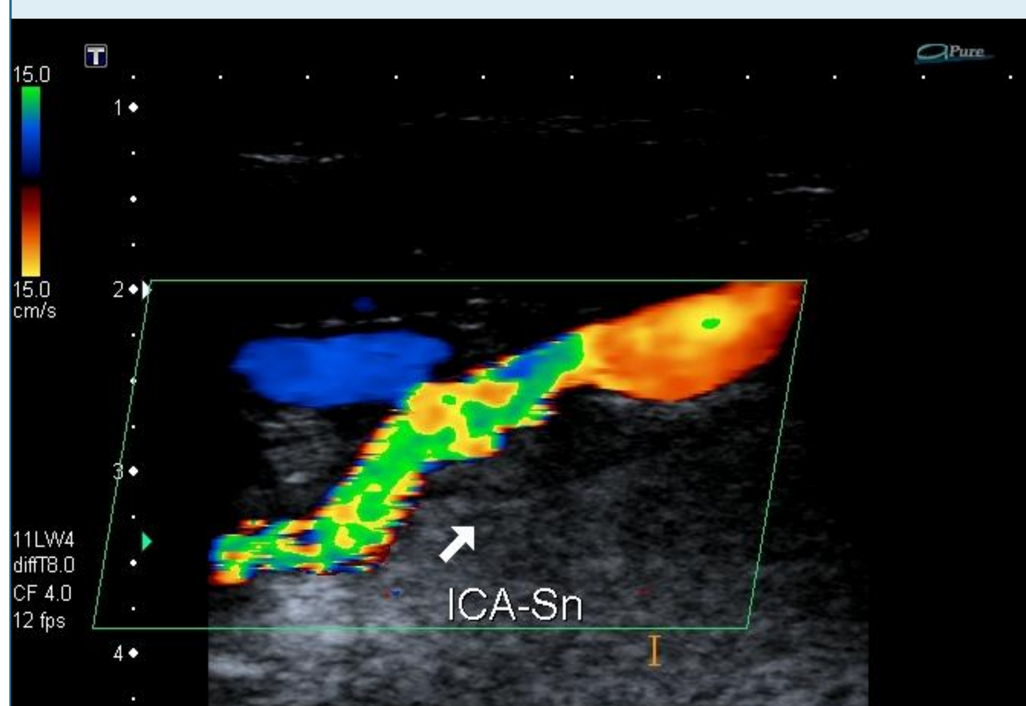
- A 49-years-old woman with negative history for headache was referred to our department for onset of nuchal pulsatile headache, with irradiation to the left frontoparietal areas. The symptoms mildly improved with non steroidal anti inflammatory drug. Previously, she has had an episode of flu.
- In the following weeks there was an irradiation to the left part of neck.
- Two weeks before hospital admission, she noticed a difficulty in chewing, especially in the left side of the mouth, and in performing rapid tongue movements. At the same time, she reported the presence of mild dysphagia and a "nasal" tone of her voice.

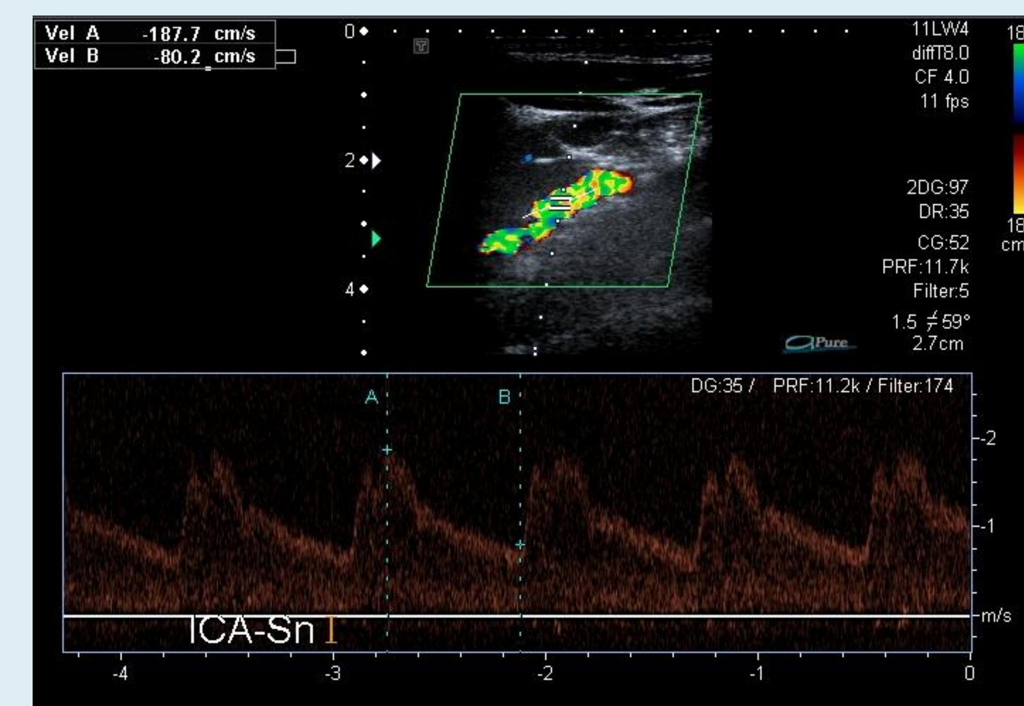
- At admission to the neurological ward, the neurological examination revealed dysarthria, ptosis in the left eye, with fluctuating left miosis, left paralysis of the soft palate, dysphagia and left tongue deviation on protrusion with atrophy in the left part; strength, sensitivity and coordination in limbs were normal, as tone and reflexes.
- So, a case of unilateral IX, X and XII nerve palsy was present.



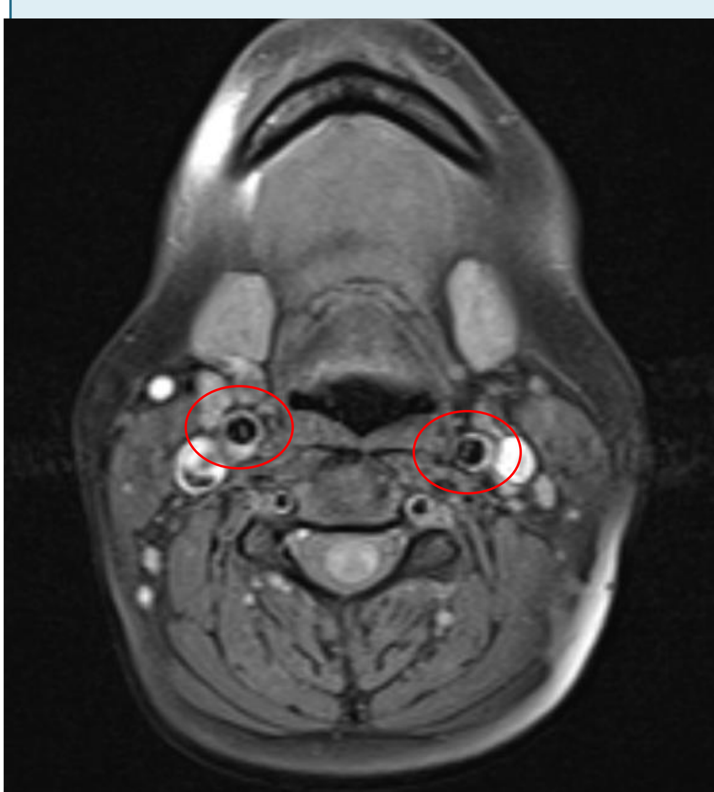


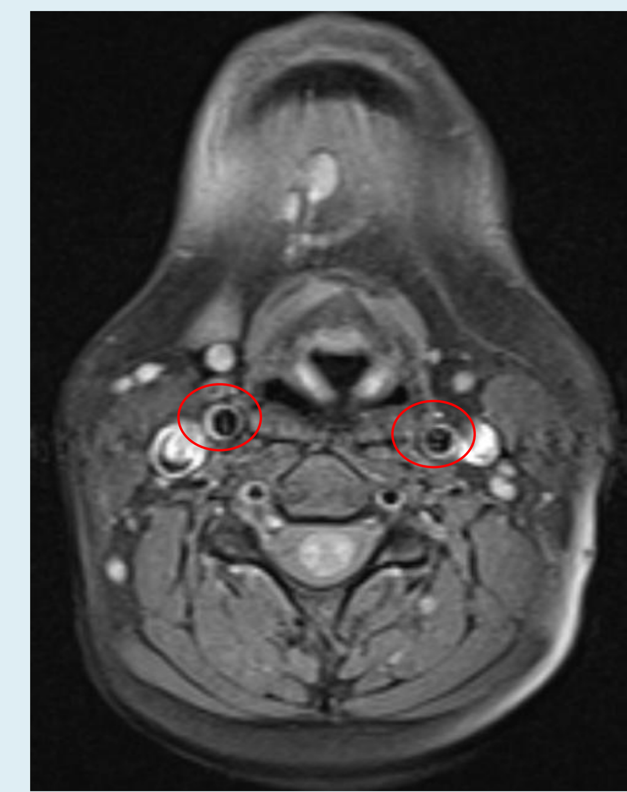
- A primary diagnostic work- up with cervical vessels color-coded duplex sonography was performed to rule out the presence of cervical artery dissection. It showed a normal carotid bifurcation without atherosclerotic wall changes, with the presence, in the distal part of both internal carotid arteries, of a mild stenosis due to wall thickening, determining a significant increase in blood flow velocities. These findings were compatible with the suspect of bilateral carotid artery dissection.



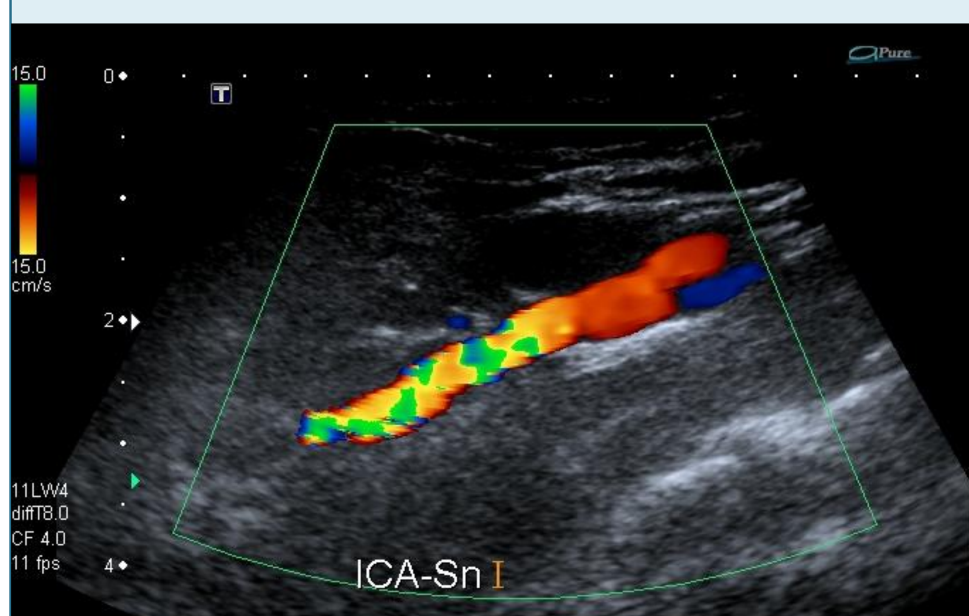


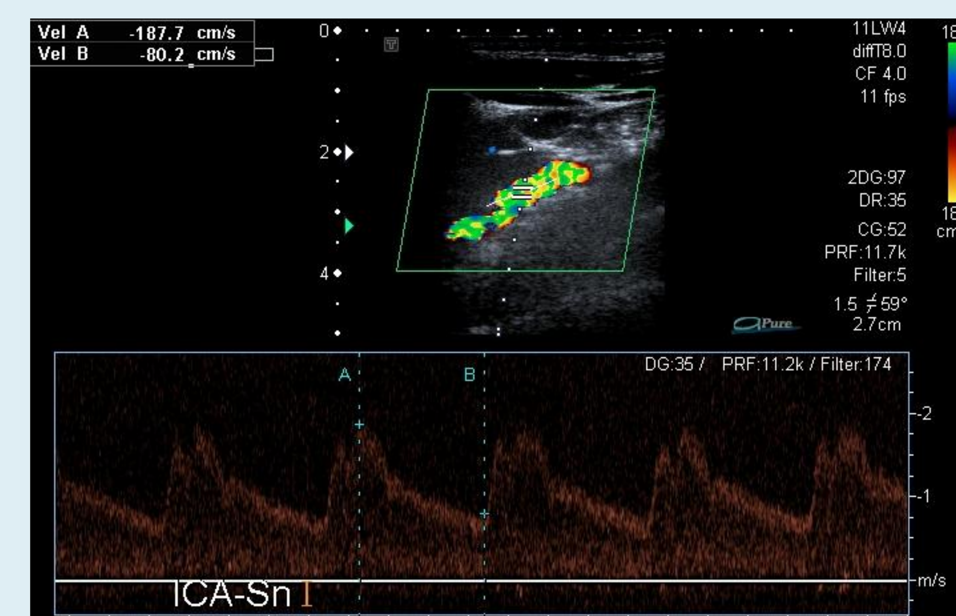
- Brain and neck MRI was performed, with T1 fat sat suppression technique that revealed the presence of a hyperintense crescent-shaped signal, representing mural hematoma in both internal carotids and diagnosis of bilateral carotid dissection was confirmed.
- There was no ischemic lesion.
- In the suspect of a vasculitis, autoimmunity screening and TC-PET were performed and both were non significant with this hypothesis.





- ASA 100 mg/die was started.
- At clinical follow up (1 month), the tongue was normal, there was mild dysphagia but, at sonological follow-up, the stenosis in the distal part of bilateral ICAs were not modified.





DISCUSSION AND CONCLUSION

Headache with neck pain can be the only manifestation of cervical artery dissection and it is the inaugural symptom in 33-86% of cases [1]. Sometimes it is followed by brain ischemia, especially if the dissection involves the subintima [1, 2]. In our case, as it is described in other cases in the literature [3], the subadventitial involvement caused not only the head and neck pain, but also the compression of the hypoglossal nerve and the sympathetic fibres without central involvement. Our case satisfied current diagnostic criteria of HIS Classification ICHD-3 Beta (6.5.1). It is the example of how the presence of isolated migrainous headache, as it was supposed to be for the first two weeks of patient's symptoms, should not mislead clinicians to diagnose a migraine attack, but it should raise suspicion of symptomatic headache, especially if no previous headache history is present. Moreover, in these cases, the role of the physician and of clinical examination are crucial in identifying among the many people with headaches those who require extensive investigations [4].

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