

Case lesson 27

A 32-year-old female, Albanian resident in Germany, two years history of migraine with aura.

A brain MRI for migraine protocol in April 2024 suspected an aneurysm of Anterior Communicating Artery. DSA was performed one year later and no aneurysm was found.

In May 2025 she experienced progressive craniocervical headache (10 out of 10) and was admitted to Neurology Department (St. Mary's Hospital Mülheim an der Ruhr) for further investigation. The clinical examination revealed a conscious and oriented patient without clear meningismus, and without other focal neurological deficits. CT scan was normal. Blood tests were normal. CSF showed only an elevated cell count of 25 cells/ul. Multiplex PCR for neurotropic viruses and bacteria was negative. The antibody sensitivity indices for Borrelia, HSV, VZV, EBV, rubella, measles, and CMV were negative. Viral meningitis was suspected and treatment with acyclovir and ceftriaxone 2 g/d was continued for one week. Clinically, the headache improved (from 10/10 to 6/10). Brain MRI was considered normal and she left the hospital.

During two weeks, cervical pain reappeared with dizziness and the local neurologist sent her back for an emergency MRI with contrast, which was considered normal.

Debut June 2025 she came back to Albania because of suffering. She didn't feel confident and was presented to Dr Z. Ndroqi with persistent cervical nuchal headaches exacerbated during Valsalva and her atlanto occipital showed sensibility when touched without meningismus. He recommended a new MRI of the head and spine.

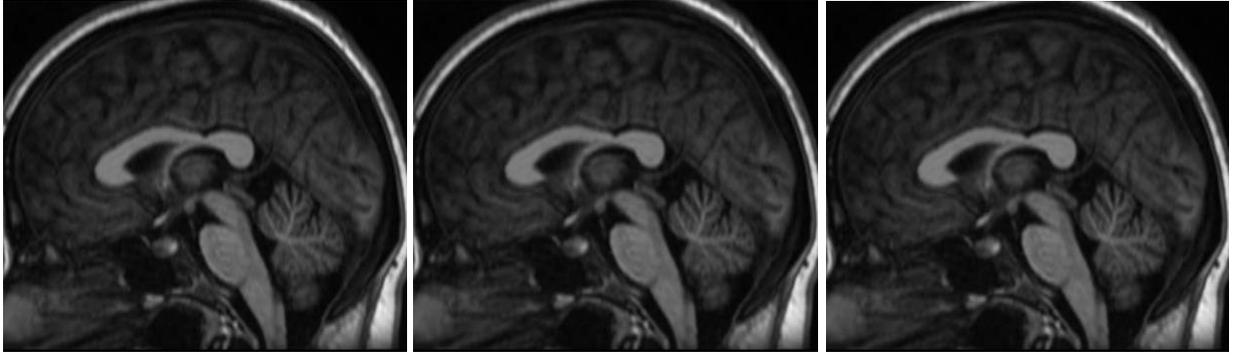


Figure 1: First MRI for migraine protocol in April 2024 in Germany: considered normal

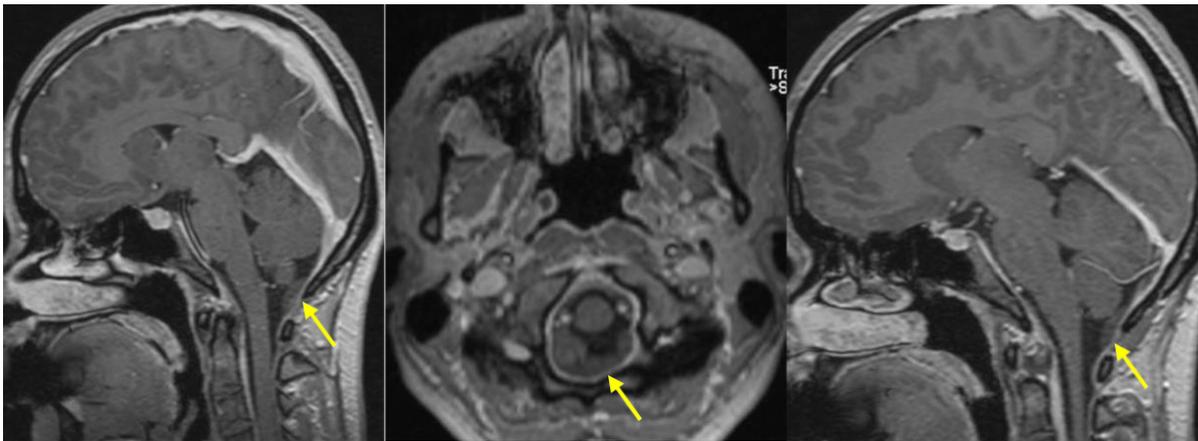


Figure 2: Second MRI during hospitalization in Germany in May 2025 was considered normal. When her headache progressed, the local neurologist there performed another head MRI with contrast: considered normal. Once in Albania, revisiting the two MRIs, a non-enhancing extracerebral lesion of the atlanto-occipital membrane persisted and was not notified (yellow arrow).

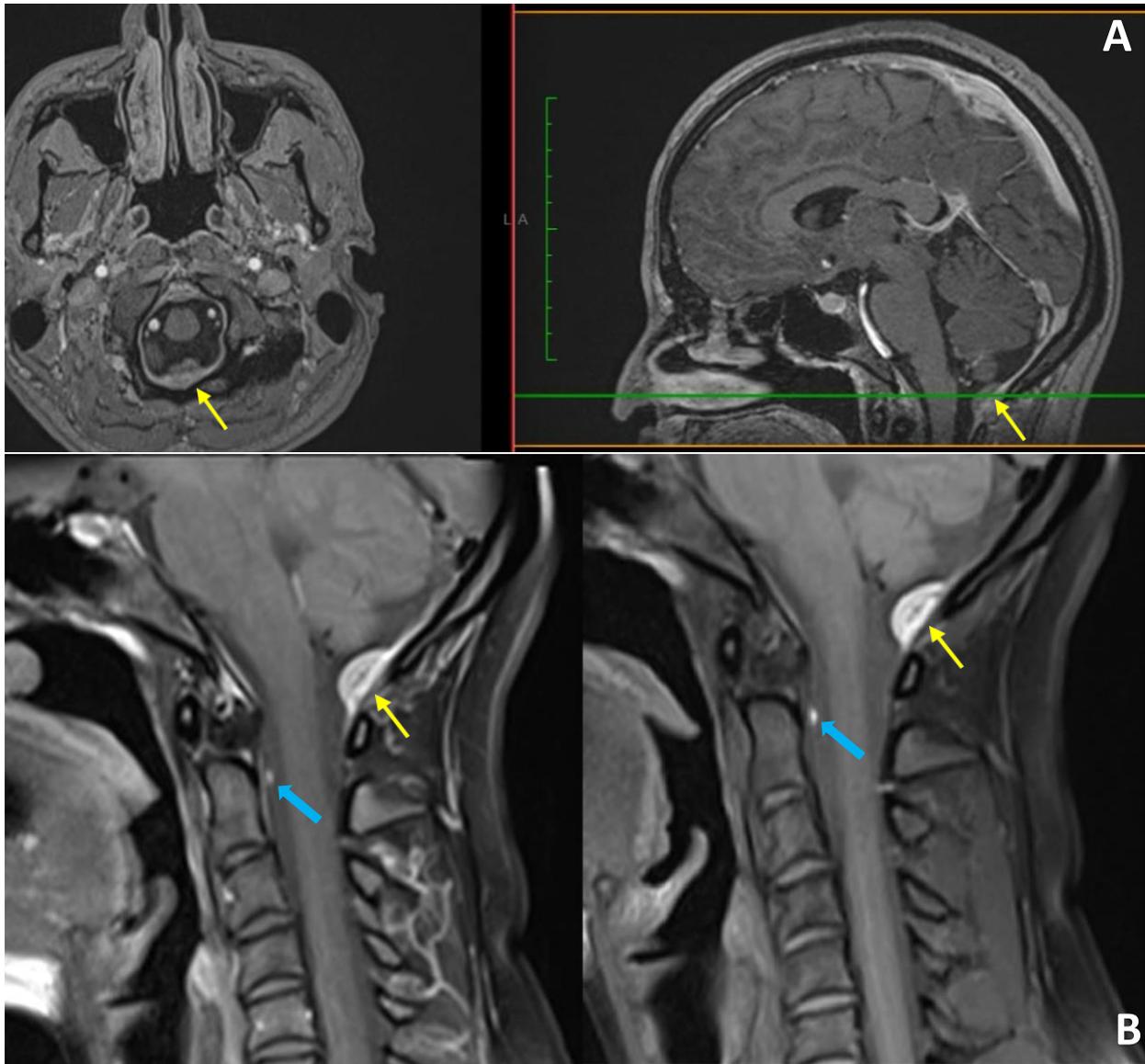


Figure 3: (A) The third brain MRI of June 2025 in American Hospital 3, showing the lesion in T1 gadolinium ISO- sequence, in axial and sagittal view (yellow arrow)

(B) MRI with contrast of cervical spine showing evolution of the lesions in the atlanto-occipital membrane (yellow arrow), the second in the anterior dura (blue arrow), the rest of the spine is normal

What is the diagnosis?

What are your suggestions or recommendations?