Oligoclonal band multiple sclerosis presenting with sudden hearing loss

I. C. Lupescu¹, I. G. Lupescu^{2,4}, A. O. Dulamea^{1,3}

¹Neurology Department, Fundeni Clinical Institute, Romania

- ²Radiology and Medical Imaging Department, Fundeni Clinical Institute, Romania
- ³Neurology Department, Carol Davila University of Medicine and Pharmacy Faculty of Dental Medicine, Romania
- ⁴Radiology and Medical Imaging Department, Carol Davila University of Medicine and Pharmacy Faculty of Medicine, Romania

Case presentation: A 33-year-old woman without significant medical history presented a first episode of neurological deficits with sudden left ear hearing loss, left facial palsy, left facial hypoesthesia and left eye vision loss, lasting for a month. After two episodes of bowel incontinence, she developed headache and left eye vision loss and was admitted to our department. MRI revealed demyelinating lesions in the left postero-lateral pons, anterior half of cervical spinal cord and deep white matter of the left temporal lobe. All laboratory findings were normal; apart from low levels of vitamin D. CSF analysis was also normal. Visual evoked potentials revealed bilateral prolonged latencies, while auditory evoked potentials showed prolonged latencies on the left, thus confirming left sensorineural hearing loss. Based on history and paraclinical assessment, diagnosis of relapsing-remissive multiple sclerosis was confirmed. Pulse-therapy was performed with symptom improvement, after which disease-modifying therapy was initiated. Discussions: Lack of oligoclonal bands may suggest a different immunogenetic profile from other MS patients. In our case, the particularity resides in the predominant cranial nerve involvement and low lesion load on MRI. While sudden sensorineural hearing loss (SSHL) is more common in MS patients than in the general population, there have been only several cases described with SSHL at onset.