Although Lermoyez’s syndrome (LS) has been described already at the beginning of the 20th century there are not many cases found in the literature and not much is written about its aetiology, diagnosis and treatment. Is there really such a low incidence or is the syndrome simply unrecognized? Some authors consider it as a variant of Meniere’s disease (MD) and some as a sole entity.

Case report

A 34-year-old male with a history of a sudden hearing loss, tinnitus and feeling of pressure in the left ear was admitted to our hospital. On his first examination he had no vertigo and no spontaneous nystagmus was seen. His hearing on the right ear has been damaged for years, but on the left ear it had been normal. Anamnestically right-sided hearing loss happened gradually over years with episodic attacks of hearing fluctuations and mild nausea. Audiogram revealed both-sided sensorineural hearing loss. According to an old audiogram hearing on the right side was stable, but deterioration of hearing threshold in the low frequencies from 125Hz-500Hz. Calculation of the hearing threshold on the left ear had been normal. On his first examination hearing on the right ear was most probably affected by the same reason.

During hospitalization the patient noticed improvement of hearing in his left ear but at the same time vertigo with spontaneous nystagmus toward the affected ear had appeared. On examination he had no signs of ear infection. Check-up pure tone audiometry confirmed improvement of the hearing in the low frequencies from 125Hz-500Hz. Caloric test revealed symmetric response, with preponderance of left-sided nystagmus.

On follow up he complained of frequent day to day fluctuations of hearing in the left ear. Hearing fluctuations were sometimes accompanied with vertigo and vomiting, sometimes not. Usually as the vertigo attack appeared, spontaneous nystagmus toward the affected side was detected and his hearing improved. Even higher doses of betahistine (24mg/8h) and intratympanic injection of dexamethasone (24mg in a single dose) did not relieve his attacks. He was prescribed a hearing aid for his right ear.

The presence of ipsilateral nystagmus and hearing improvement at the time of vertigo (with exclusion of some other underlying causes) made us suspect of a variant of Meniere’s disease – Lermoyez’s syndrome. The patient’s hearing on the right ear was most probably affected by the same reason.