Hearing loss in young boy caused by cerebellar stroke- case report

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Sudden sensorineural hearing loss (SSHL) and vertigo in children are relatively uncommon. The assessment of acute vertigo in childhood is often challenging. Fortunately, a central cause is rare. The incidence of ischemic strokes in children is given as six cases in 1 000 000 children per year. The aim of this report is to present a rare case of vertigo and hearing loss in young patient developed after cerebellar ischemia. A 15-yearold boy presented in emergency ENT department with symptoms of dizziness, right sided hearing loss and tinnitus. Two days prior to the visit, he participated in a wrestling training, after which he started to feel nauseous, developed dizziness without rotatory component and mild hearing loss in right ear. Few hours after that he vomited two times and noticed that his hearing worsened. History of ear inflammation or recent viral infection in upper airway was negative. Audiometry exam showed right sided sensorineural hearing loss, with thresholds from 15 to 70 dB. Upon examination he was given oral corticosteroid therapy. MRI showed three areas of restricted diffusion in right cerebellar hemisphere, consistent with ischemic lesions. He was then referred to neuropediatric department for additional diagnosis and treatment. On follow-up at 6 months, audiometric testing showed stationary findings without worsening of hearing threshold levels. The literature contains numerous models of the pathogenesis of SSHL, with childhood SSHL having certain peculiarities. In practical terms, the multifactorial nature of SSHL is important in the choice of diagnostic methods and treatment methods. Early recognition of central causes which could lead to severe health consequences is extremely important

Key words: sensorineural hearing loss, children, cerebellar stroke