A Case of Hypertrophic Pachymeningitis presenting with Hearing Loss and Facial Nerve Palsy

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Hypertrophic pachymeningitis (HP) is a rare disease and patients with HP present with headache and multiple cranial nerve palsy. We report herein on a case of HP with hearing loss and facial palsy. A 61-year-old woman presented with headache, right hearing loss, right facial palsy and numbness of the right chin. She was first diagnosed as having severe acute otitis media. Most of the symptoms persisted after treatment with antibiotics and corticosteroids. Ga-DTPA-enhanced magnetic resonance imaging (MRI) revealed diffuse thickening of the dura mater consistent with HP. HP is caused by several diseases such as infection, collagen disease, vasculitis syndrome, IgG4 related disease, and metastatic cancer. In this case, HP was caused by metastatic rectal cancer to the cranial bone and dura mater. The facial palsy and chin numbness improved after the chemoradiotherapy, whereas hearing loss did not. HP should be taken into consideration when multiple cranial nerve palsy are observed. Ga-DTPA-enhanced MRI is useful in the diagnosis of HP.

Keywords : hypertrophic pachymeningitis, hearing loss, facial nerve palsy, otitis media, numb chin syndrome

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Pure tone audiometry shows mixed hearing loss in the right ear.

A protruding lesion with enhancement can be observed in the left temporal and occipital fossa, accompanied by external infiltration in the cranial bone.

a

b

(a: axial section, b: coronal section) Ga-DTPA-enhanced T1 weighed MRI visualizes diffuse hypertrophy in the dura mater, in particular in the left temporal bone.