Clinical image and pathology of hypertrophic cranial pachymeningitis

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ABSTRACT. The objective of this study was to examine the clinical findings, magnetic resonance imaging (MRI), pathological features, and treatment experiments of patients with hypertrophic cranial pachymeningitis (HCP). The clinical findings, MRI, and pathological appearances of 9 patients with HCP were analyzed retrospectively. The thickened dura mater was markedly enhanced after contrast media injection. The lesion near the brain hemisphere presented long regions of T1- and T2-weighted abnormal signal intensities. The abnormal signal intensities of the brain tissue were decreased significantly. Pathological examination demonstrated chronic inflammation changes, with cerebral dura mater fibrous tissue showing obvious hyperplasia, and the periphery of the blood vessel showing a great quantity of infiltrating phlegmonosis cells. HCP mainly presents headache and paralysis of multiple cranial nerves. The distinctive signs on brain MRIs involve strengthening the signal in the cerebral dura.

Key words: Hypertrophic cranial pachymeningitis; Clinical image; Magnetic resonance imaging; Pathological features