Hemiatrophy as the Initial Sign of Germinoma in Corpus Callosum

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A 28-year-old man present with progressive right-sided hemiparesis, dystonia and cognitive impairment for 1 year. MRI showed severe hemiatrophy in left hemisphere and brainstem without significant mass lesion (Figure 1). Serum tumor markers, ceruloplasmin, ferritin, CSF IgG, lymphocyte subpopulation, encephalitis-related antibodies and EEG were negative. Meanwhile, CT and CTA showed no thickened calvarium or cerebrovascular occlusion. After anti-inflammatory treatment for possible Rasmussen’s encephalitis, his symptoms repeatedly alleviate-recure and gradually deteriorated over few months, and repeated MRI showed a diffused lesion infiltrated the corpus callosum (Figure 2). Pathological specimens obtained by stereotactic biopsy revealed primary germinoma. Chemo-radiotherapy was given and a 5-year recurrent-free was achieved.\textsuperscript{1,2}

Reference


Figure legends

Figure 1. Initial MRI findings

Initial MRI showed left hemispheric atrophy on T2-weighted imaging (A) and hemiatrophy of ipsilateral peduncle on T1-weighted imaging (B). Enhanced MRI showed no abnormality (C and D).

Figure 2. MRI findings during follow-up

Enhanced MRI during follow-up demonstrated a diffused mass lesion in corpus callosum (A and B). Three months after chemo-radiation therapy, the tumor was eliminated (C).
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