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Isolated central nervous system relapse in a patient with diffuse large B cell lymphoma

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DESCRIPTION

A 57-year-old woman was admitted to our hospital with headache, dizziness and nausea in August 2010. On admission, neurological examination revealed no significant abnormalities and the cranial nerves were also intact. Diffuse large B cell lymphoma of the liver was diagnosed in April 2006. The patient was treated with four cycles of rituximab-cyclophosphamide-doxorubicine-vincristine-prednisolone therapy and underwent extended left hepatic lobectomy following poor response to chemotherapy. Complete remission (CR) was subsequently achieved and positron emission tomography/CT performed in April 2010 confirmed CR. Brain MRI demonstrated a hyperintense area on T2-weighted imaging and this lesion showed gadolinium enhancement on T1-weighted imaging, about 20 mm in size, in the left cerebrum close to the fourth ventricle (figure 1). Biopsy was difficult to perform for this lesion. Examination of cerebrospinal fluid showed a white blood cell count of 49 / μ l, a lactose dehydrogenase level of 52 IU/l and a total protein value of 98 mg/dl. Cytology demonstrated slightly large lymphoid cells with a large nucleus/cytoplasmic ratio (figure 2), and these cells showed positive results for CD5, CD19, CD20, IgM and

κ -chain on immunophenotyping analysis, compatible with the characteristics of the previously diagnosed lymphoma. These results led to a diagnosis of B cell lymphoma, probably representing isolated central nervous system (CNS) relapse, although biopsy had not been performed. The patient received methotrexate (MTX)-based chemotherapy (rituximab, MTX, procarbazine and vincristine) with the addition of whole-brain radiotherapy.¹ Clinical manifestations improved immediately and CR was achieved after two cycles of the above regimen.

Competing interests None.

Patient consent Obtained.

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Figure 1 Brain MRI at diagnosis.

Figure 2 Cytological examination with Giemsa staining of cerebrospinal fluid at diagnosis.

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