



다발경화증과 유사하게 발현한 동종 조혈모세포이식 후 중추신경계 이식편대숙주반응

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Central Nervous System Graft-Versus-Host Disease Mimicking Multiple Sclerosis after Allogeneic Hematopoietic Stem Cell Transplantation

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A 64-year-old female underwent salvage chemotherapy followed by allogeneic hematopoietic stem cell transplantation (alloHSCT). At 18 months after alloHSCT, she developed dysarthria and gait disturbances. Brain MRI revealed multifocal lesions with enhancement (Fig. 1A-D). A brain biopsy near the right callosal splenium showed patchy demyelination and T-cell infiltration (Fig. 1I-L). Spine MRI revealed multiple short-segment myelitis with enhancement (Fig. 1E-H). Since central nervous system (CNS) graft-versus-host disease (GVHD) after alloHSCT can lead to severe neurological complications, further research is needed to elucidate the risk factors of CNS GVHD and to manage it appropriately.^{1,2}

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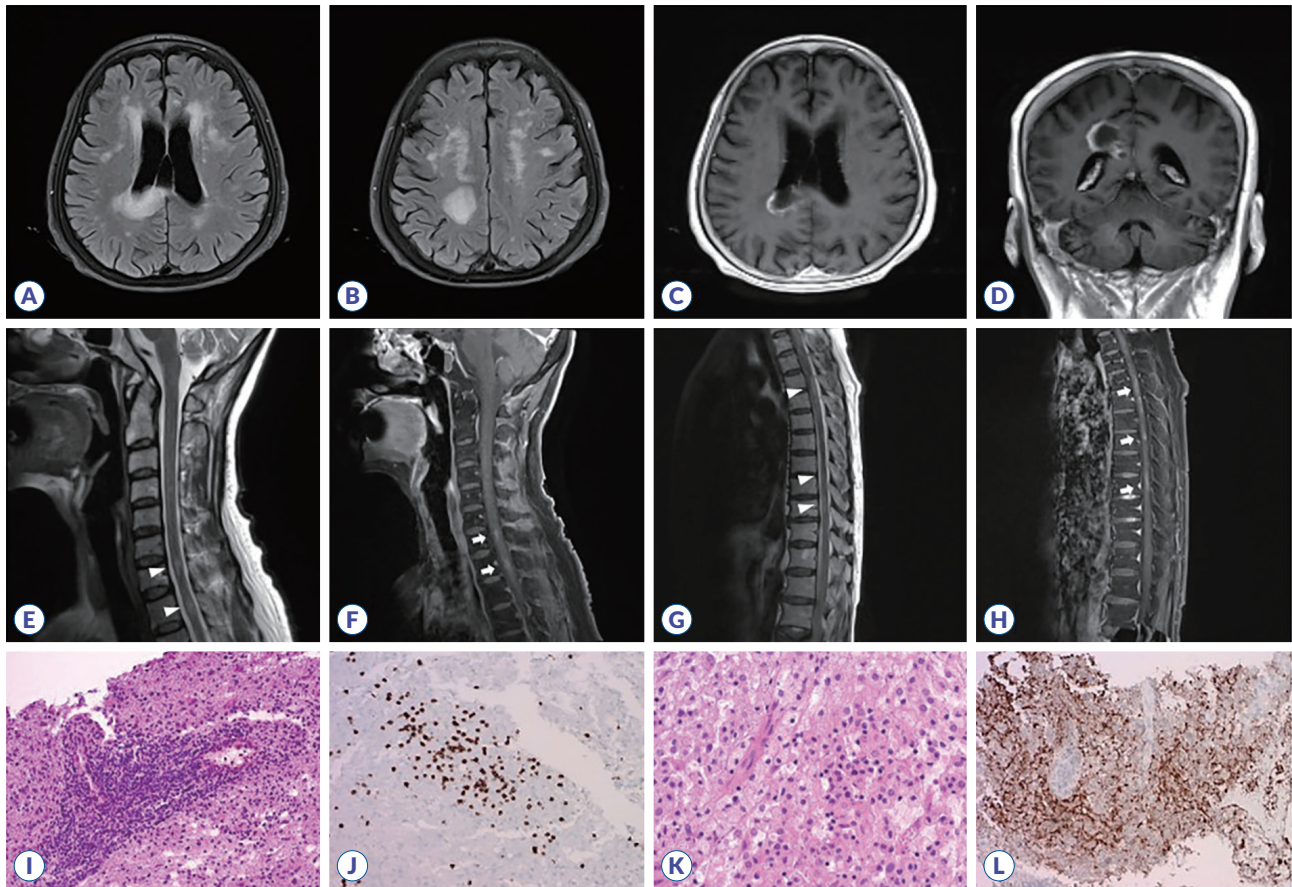


Figure 1. Initial brain and spine MRI (A-H) and pathologic findings of corpus callosum biopsy (I-L). (A-D) Initial brain MRI showed markedly increased extent of multifocal patchy and confluent T2/fluid-attenuated inversion recovery hyperintense lesions with heterogeneous enhancement at the right parietal lobe and corpus callosum. (E, F) Spine MRI showed multiple T2 hyperintense lesions (C6-7 and T1 segments, arrowheads) with nodular enhancement (arrows). (G, H) Multiple eccentric short-segment thoracic spinal lesions (T4-T5/6, T6/7 and T9-10 segments, arrowheads) with multifocal enhancing lesions (arrows) were also observed. (I) Infiltration of some cytotoxic T-lymphocytes was observed, especially in a perivascular cuffing pattern, on frozen section (Hematoxylin and Eosin [H&E] staining, $\times 100$). (J) Lymphocytes were stained with CD8 immunohistochemical stain ($\times 200$). (K) Most parenchyma was filled with many foamy macrophages and some lymphocytes (H&E, $\times 200$). (L) Staining for myelin basic protein (MBP), suggesting myelin phagocytosis, is patchy within the lesion, indicative of diffuse demyelination (MBP immunohistochemical stain, $\times 100$).