## **Peripheral T-Cell Lymphoma**

Peripheral T-cell lymphoma (PTCL) is defined as a diverse group of aggressive lymphomas that develop from mature-stage white blood cells called T-cells and natural killer cells. PTCL is classified as a subtype of Non-Hodgkin lymphoma (NHL).

## **Case report**

A 22-year-old man who presented an indolent large scalp mass in the right frontal scalp region. The patient's physical examination demonstrated no palpable mass in the chest, abdomen, and extremities. The brain CT revealed a high-density large scalp mass of the subgaleal layer in the right frontal and a small scalp mass of the subgaleal layer in the left frontal. The brain MRI showed multifocal enhancing masses in the bilateral dura, the subgaleal layer of the scalp, and the skull. The patient underwent removal of the tumor found in the right frontal scalp. The histologic diagnosis was peripheral T-cell lymphoma. Bone marrow aspiration showed the involvement of T-cell lymphoma. The patient received chemotherapy with cyclophosphamide, vincristine, doxorubicin, and prednisolone (CHOP protocol) for 3 cycles. The patient was discharged without neurological deficit. The patient showed no evidence of recurrence 15 months after surgery. We report a rare case of peripheral T-cell lymphoma mimicking benign scalp tumors <sup>1)</sup>.

A 30-year-old woman developed consciousness disturbance on postpartum day three. Because brain MRI showed multiple edematous lesions in both hemispheres, vasculitis or encephalitis was initially suspected, and diagnostic therapy was initiated with the administration of steroids. One month later, the patient suddenly developed a subarachnoid hemorrhage followed by acute hydrocephalus. Emergent ventricular drainage and lesion biopsy were simultaneously performed. Based on the findings, the patient was diagnosed with peripheral T-cell lymphoma not otherwise specified(PTCL-NOS). Laboratory findings indicated Epstein-Barr virus(EBV)infection. Moreover, the same diagnosis was supported by breast and bone marrow biopsies. Thus, the brain lesions were presumed to be metastatic in nature. The prognosis of PTCL-NOS is severely poor in pregnant women as diagnosis is delayed owing to limitations of radiological examinations and because symptoms can be confused with those of other diseases or hyperemesis gravidarum. Additionally, the alteration of immunotolerance in association with pregnancy and EBV infection might have influenced the aggressive features of this case. When a pregnant woman presents with neurological symptoms, malignant lymphoma should be considered when making a differential diagnosis <sup>2)</sup>

Kim MS, Pyo SY, Park HY, Jo HR, Kim J. Peripheral T-Cell Lymphoma Presenting as a Scalp Mass. Brain Tumor Res Treat. 2022 Apr;10(2):113-116. doi: 10.14791/btrt.2022.0004. PMID: 35545831.

Eda H, Miyazaki T, Oonishi C, Mitaki S, Nakagawa F, Hagiwara S, Nagai H, Akiyama Y. [A Case of Metastatic Peripheral T-cell Lymphoma of the Central Nervous System During the Perinatal Period]. No Shinkei Geka. 2019 May;47(5):559-563. Japanese. doi: 10.11477/mf.1436203981. PMID: 31105080.

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