A Case of Interdigitating Dendritic Cell Sarcoma of a Neck Lymph Node

Hiroki Takeda, Satoru Miyamaru, and Koichi Haba

We report herein on a case of interdigitating dendritic cell sarcoma (IDCS) of a neck lymph node. A 43-year-old man was seen for left neck swelling. The left neck was found to have a smooth and soft tumor. We found atypical cells with fine needle aspiration cytology, and performed a cervical lymph excisional biopsy. Diagnosis was confirmed by histology and immunostaining. After the lymph node biopsy, additional radiation therapy was performed. Generally, diagnosis of IDCS is difficult. In this case, the tumor lesion was limited to a cervical lymph node and fine needle aspiration cytology suggested the possibility of malignancy. Treatment resulted the patient’s being disease-free at 18 months after radiation therapy.

Keywords: interdigitating dendritic cell sarcoma, lymph node, radiation therapy

References

Ultrasonography of the neck
A mass measuring $25.0 \times 11.8 \times 24.2$ mm in size is detected in the left accessory nerve domain. It contains a cystic (arrowhead) and solid portion (arrow).

Cytological diagnosis
A: An atypical cell (arrows) with a high N/C ratio and a cleaved nucleus.
B: An atypical cell (short arrows) with a nucleolus showing emperipolesis.
C: Neoplastic cells showing coarse chromatin and marked cleaved nuclei.
D: Large cells (arrowheads) in the form of the gyrus.

Histological diagnosis
A: Dense proliferation of the typical cells.
B: The cells have irregular large nuclei (arrow).
C: An irregular nucleus (arrowheads) and abnormal mitosis.
D: The neoplastic cells are S-100 positive.