A Case of Synovial Sarcoma Arising from the Cervical Region

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Synovial sarcomas account for 5% of all pediatric soft tissue sarcomas, and primarily arise in the extremities. We report a case of synovial sarcoma arising in the right infra-auricular region. A 29-year-old woman presented with a 2-months' history of a growing and slight painful tumor in the infra-auricular region. Pleomorphic adenoma arising from the lower pole of the parotid gland was suspected based on the findings of MRI and fine needle aspiration cytology of the tumor, and the tumor was resected. However, additional dissection was necessitated by the final diagnosis of synovial sarcoma by histopathological examination of the resected tumor. The SYT fusion gene from chromosomal translocation was detected by fluorescence in situ hybridization. Eight months later, a recurrent tumor was detected in the almost same region, and further dissection was performed with preservation of the mandibular branch of the facial nerve. The patient was administered postoperative radiotherapy at the dose of 60Gy, even though it was possible to resect the tumor with an adequate safety margin.

Keywords : synovial sarcoma, cervical region, SYT gene, recurrence

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MRI findings before first operation (axial view)

The tumor is localized in contact with the right parotid gland. The tumor shows low intensity under T1 weighting (A) and high intensity under T2 weighting (B).

MRI findings before the third operation (axial view)

The tumor has recurred in the same region. In addition, MRI findings show the same intensity under T1 (A) and T2 weighting (B).

Intraoperative findings of the third operation

The tumor has been dissected together with the lower pole of the parotid gland. The mandibular branch of the facial nerve has been preserved (arrow). (PG: parotid gland, DGM: digastric muscle, JV: jugular vein)