An Unusual Case of Hybrid Peripheral Nerve Sheath Tumor (PNST) in the Nasal Cavity: a case report

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Hybrid peripheral nerve sheath tumor (PNSTs), schwannoma/neurofibroma is a recently described benign nerve sheath tumor that is typically manifested as a dermal tumor on the extremities and trunk. However, occurrence in head and neck areas, especially in the nasal cavity, is extremely rare (there are only several cases reported so far). In this presentation, we report such a case. A 56-year-old woman was presented at our department with chronic nasal obstruction and anosmia. MRI and CT scan were performed. The imaging showed an intraseptal tumor in the middle and caudal part of the nasal septum. The tumor extended to ethmoids bilaterally, repressing the anterior wall of the sphenoid and medial wall of the maxillary sinus. In 2008 and 2009, the patient underwent endoscopic surgery for nasal polyps. The patohistological diagnosis was schwannoma. Considering the extent of the tumor and the diagnosis, we decided to perform an endoscopic removal of the tumor with a possible pericranial flap for the skull base defect. Histologically, the tumor consisted of two components including schwannoma and neurofibroma. Imunohistochemically all tumor cells were positive on S100 and SOX10, while p16 antigen was positive in 50% of the tumor cells, respectively. Mitosis and necrosis were not found. Based on these findings, the lesions were considered to be hybrid neurofibroma-schwannomas. In conclusion, although hybrid schwannoma/neurofibroma tumors are extremely rare in the nasopharyngeal area, they should be considered in differential diagnosis of tumors in the nasal cavity.

Key words: PNST, nasal, cavity, schwanomma/neurofibroma,