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Poster Presentation

Sinonasal Collision Tumor of Glomangiopericytoma and B-Cell Lymphoma

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ABSTRACT

Introduction. Sinonasal collision tumors are exceptionally rare, and glomangiopericytoma (GPC) is an uncommon perivascular myoid neoplasm accounting for less than 0.5% of sinonasal tumors. GPC can mimic other spindle-cell tumors, and recognition of perivascular morphology with immunohistochemistry with SMA, nuclear and cytoplasmic β-catenin are essential. Sinonasal B-cell lymphomas are also uncommon and may be difficult to classify in fibrotic biopsies; the coexistence of these two entities appears exceedingly unusual.

Case Description. A 69-year-old man presented with progressive left-sided nasal symptoms. Endoscopy showed an obstructing left nasal cavity mass. Biopsy showed two components: a spindle-cell proliferation with thin-walled branching ("staghorn") vessels and perivascular hyalinization, and scattered monomorphic small round blue cells in dense sclerosis. Spindle cells were SMA-, nuclear and cytoplasmic β-catenin-positive, STAT6- and TLE1-negative, and SS18 FISH-negative, supporting GPC. The round-cell component was CD20-positive but too scant for subclassification.

Left partial maxillectomy showed a diffuse monomorphic round-cell infiltrate in sclerotic stroma. Cells were CD79a-, PAX5-, and BCL6-positive, with focal weak CD10 and Ki-67 ~25–45%, confirming B-cell lymphoma.

Discussion. The key decision was to evaluate the spindle-cell and round-cell components separately rather than force a single diagnosis. A targeted panel supported GPC and excluded major mimics. The round cell component was identified morphologically and confirmed by immunophenotypic findings as B-cell lymphoma; however, precise subclassification could not be established because of the dense sclerosis, and molecular testing was not performed.

Conclusion. The sinonasal mass contains two distinct neoplasms. The main lesson is to assess each component independently, use targeted immunohistochemistry, and correlate biopsy with resection.

Key words. *B-cell lymphoma, collision tumor, glomangiopericytoma, nasal cavity, neoplasms*