

# Endoscopic Surgical Approaches to Manage Skull Base Vascular Anomalies

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**Aims/Goals:** To describe technique, efficacy, and safety of novel endoscopic approaches to sinonasal and skull base vascular malformations, including an intervention performed through the nasal cavity. There are few reports of using this technique for complex vascular malformations located at the skull base.

**Methods:** Index patients were selected that illustrate surgical techniques for excision of skull base vascular malformations. Data on pathology, operative details including management of bleeding, use of preoperative embolization, post operative course and complications were collected.

**Results and Interpretation:** Surgical approaches utilized were transnasal, transorbital, transmaxillary, and a lateral sublabial approach to the infratemporal fossa. Vascular malformations of the nasal cavity and skull base can be treated with endoscopic surgical approaches that minimize skin incisions and collateral tissue damage. Multidisciplinary surgical planning is required both for the surgical approach and preoperative embolization technique.

**Future Directions:** Multiple ongoing projects; manuscript submitted.

