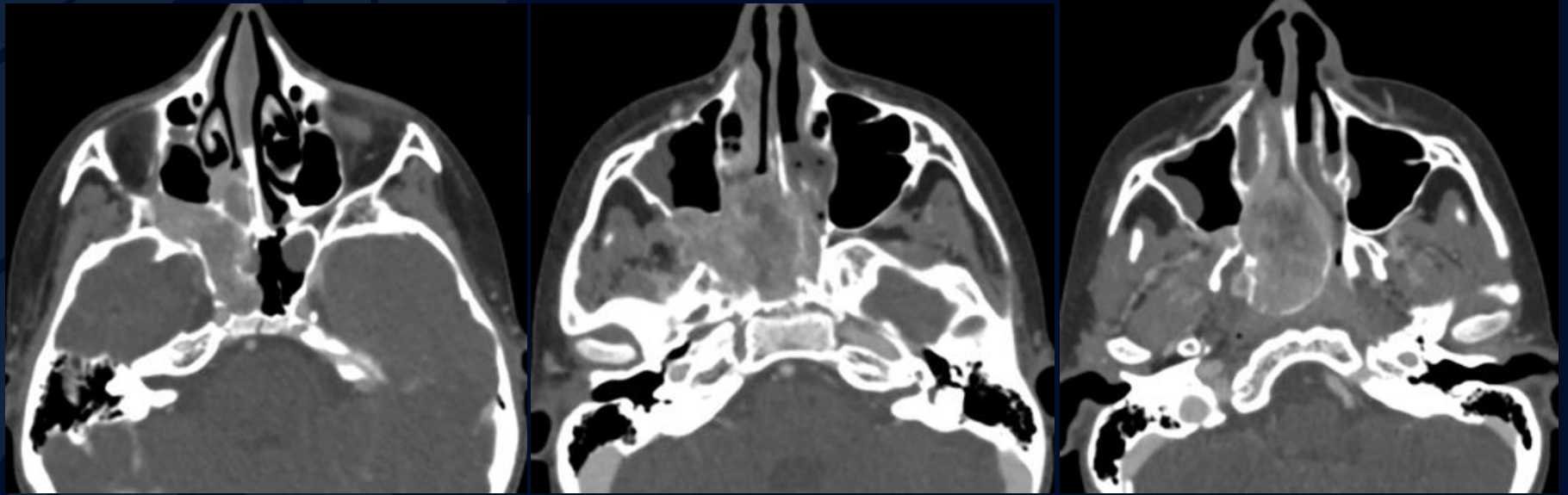
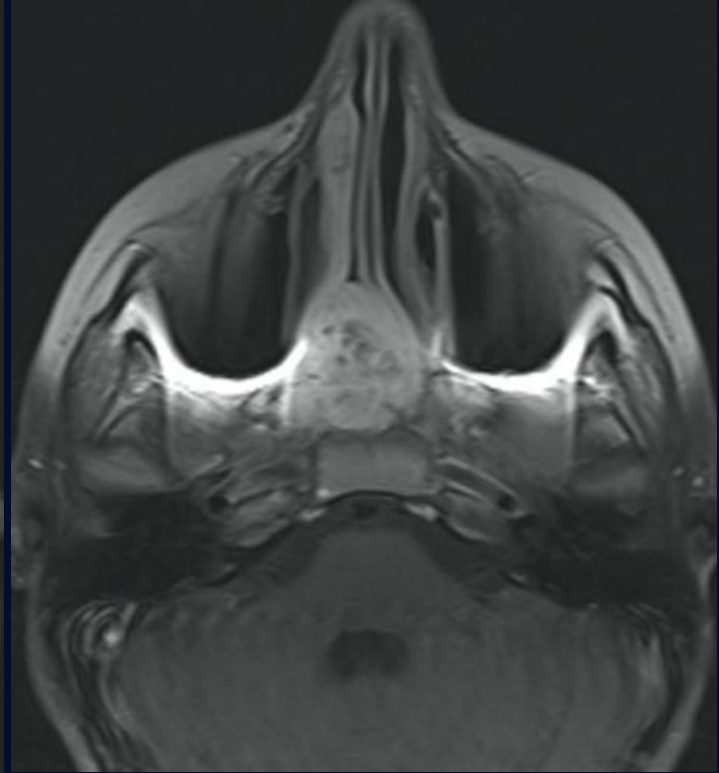
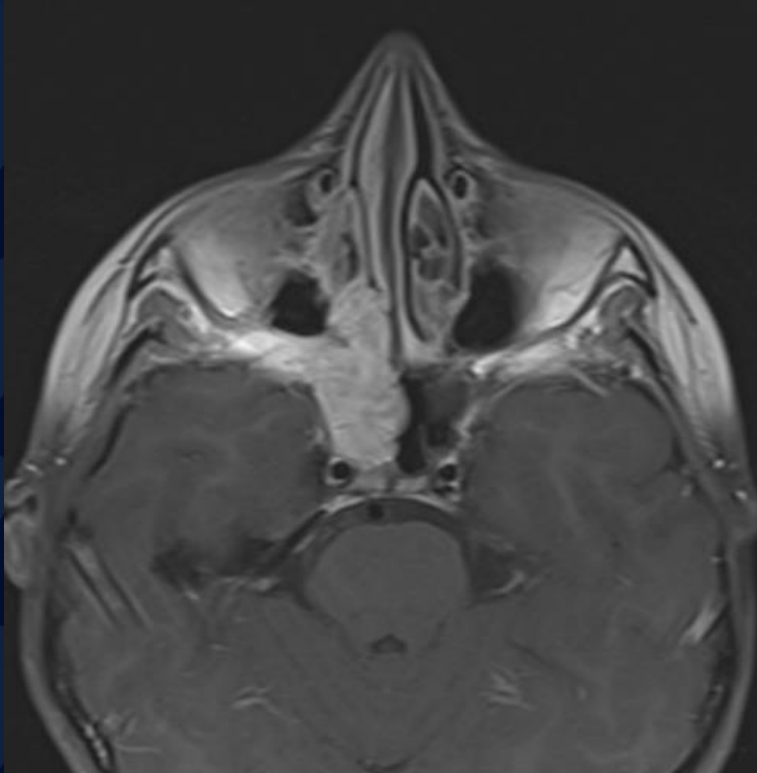
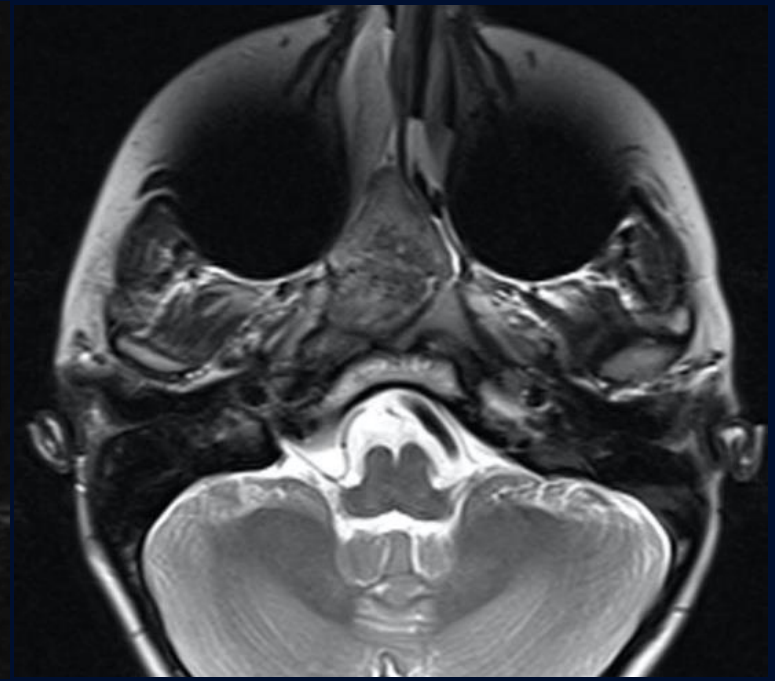
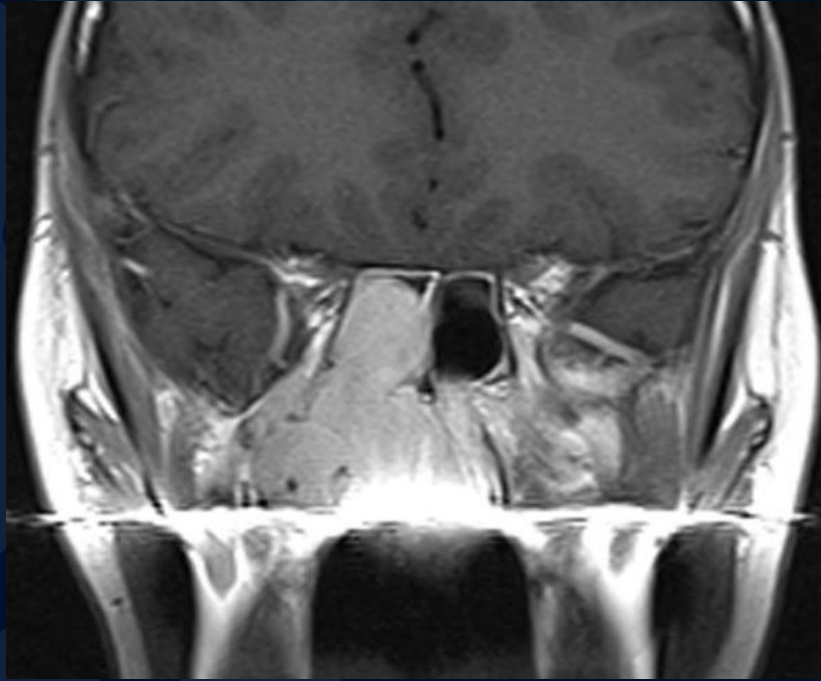


# 12 y/o boy who presented with nasal congestion and recurrent epistaxis

Martin Ollenschleger, MD







A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

?

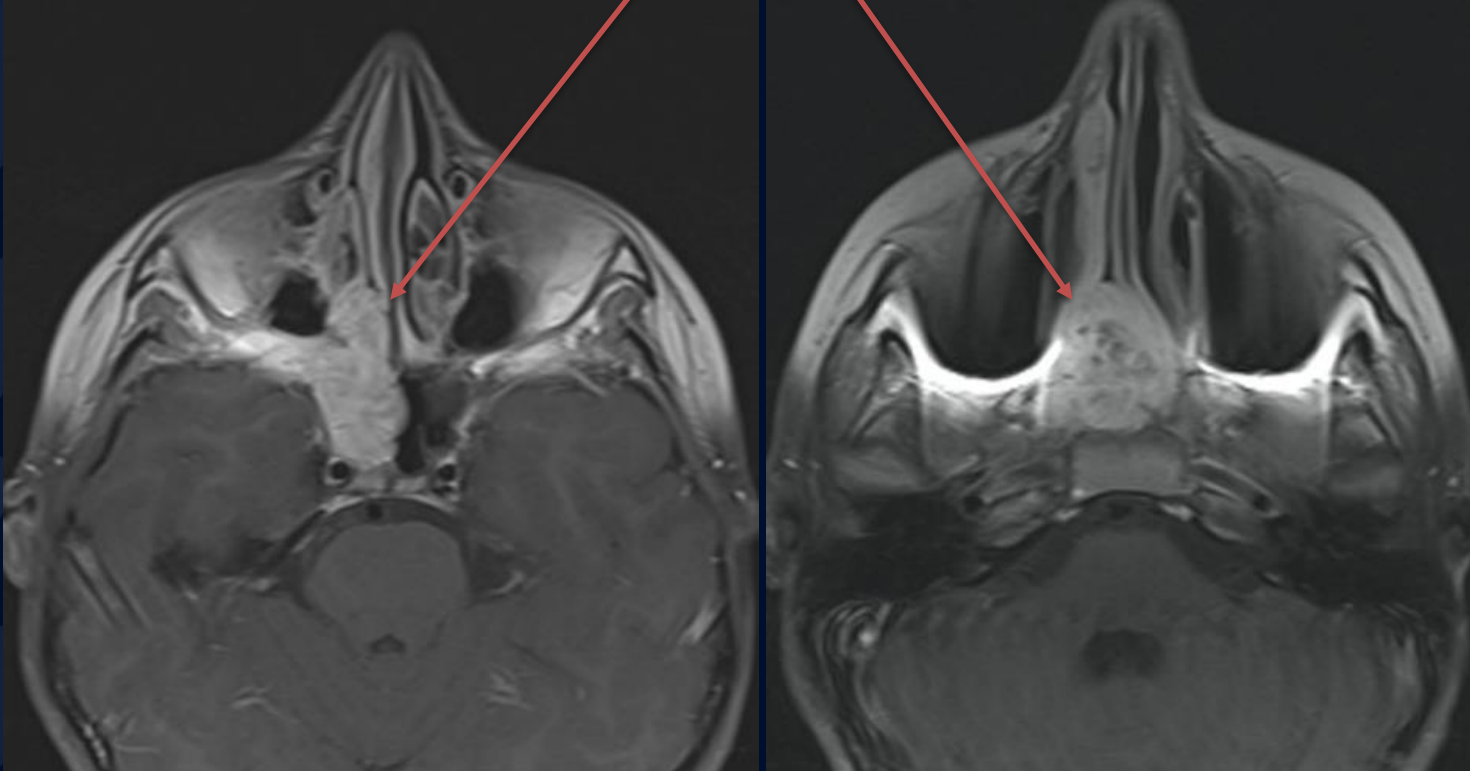
# Juvenile Angiofibroma

Enhancing nasal cavity  
soft tissue mass



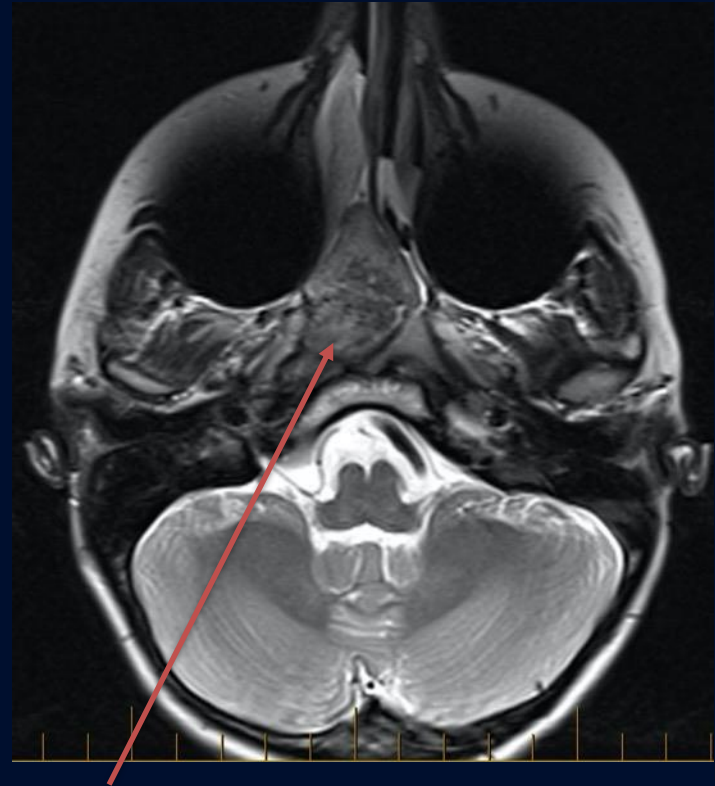
Expanded pterygopalatine  
fossa and anterior bowing of  
maxillary sinus posterior wall

Avid enhancement with  
internal flow voids





Avid enhancement with  
internal flow voids



Heterogenous signal  
intensity on T2

# Juvenile Angiofibroma

- Benign fibrovascular tumor arising in the posterior nasal cavity / sphenopalatine foramen, frequently extending throughout the nasal cavity and into the nasopharynx. 90% of JAFs involve the pterygopalatine fossa.
- Tumor of adolescents and young adults, with peak age of 14-17 and almost exclusively male.
- Patients present with symptoms related to nasal obstruction and recurrent epistaxis
  - Sinusitis, anosmia, middle ear effusions

# Juvenile Angiofibroma

- Imaging findings
  - CT: Avidly enhancing soft tissue mass within nasal cavity and nasopharynx. Bony remodeling and erosion is common with anterior bowing of posterior wall of maxillary sinus and expansion of pterygopalatine fossa commonly seen.
  - MR: Heterogenous on T1 and T2 weighted images. Avid, prominent enhancement on post contrast images with multiple flow voids representing tumor vessels.
- Arterial supply is usually ECA branches and is very amenable to embolization
  - Sphenopalatine and accessory meningeal arteries arising from internal maxillary artery
  - Ascending pharyngeal artery

# References

- Griauzde J, Srinivasan A. Imaging of vascular lesions of the head and neck. Radiol Clin North Am. 2015;53(1):197-213.
- Ollenschleger M, Juvenile Angiofibroma. Radiology Online. 2020.