

# **Retropharyngeal Schwannoma**

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# Clinical Presentation

- 44 year old male presents with progressive neck pain, 'shooting' nerve pains, throat discomfort and dysphagia x 6 years.

# Imaging

## CTA neck

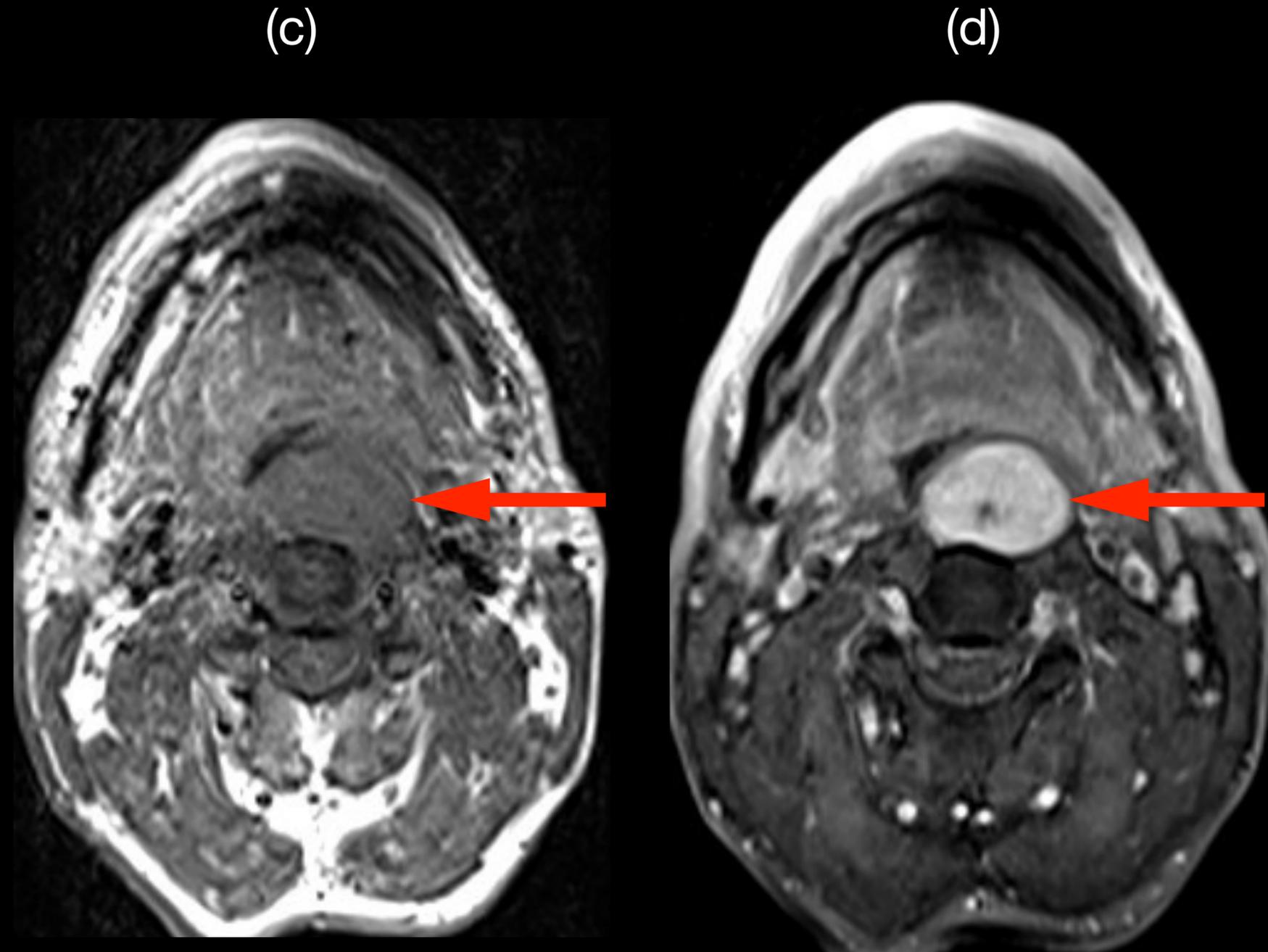
- (a) Axial CTA
- (b) Sagittal CTA
- left-sided retropharyngeal lesion w/ mass effect on oropharynx; a fat plane is present b/w mass and ECA branches; mass is isoattenuating to surrounding muscle w/ central low attenuation



# Imaging

## MRI neck

- (c) Axial T1 pre-contrast
- (d) Axial T1 post-contrast
- round, well-circumscribed mass which is iso/hypointense (c) and demonstrates avid enhancement (d)

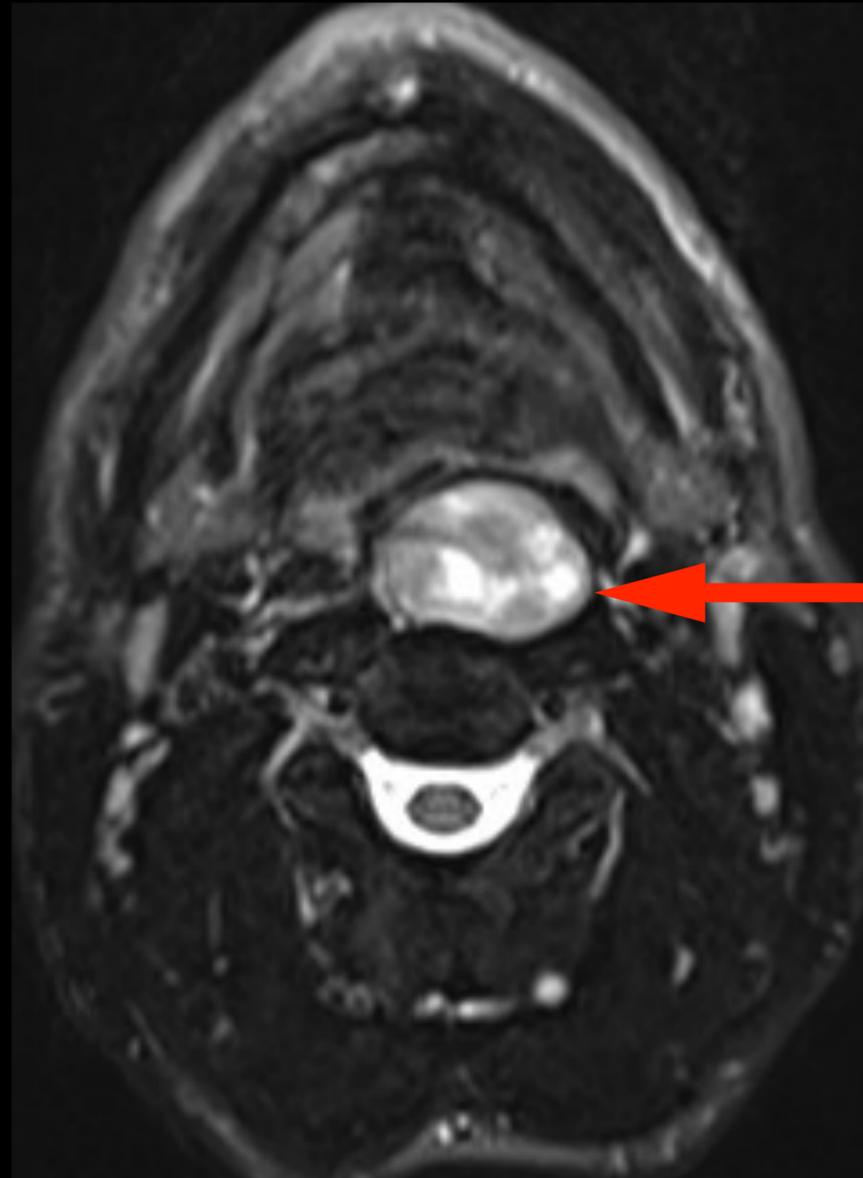


# Imaging

## MRI neck

- (e) Axial T2
- (f) Sagittal T1
- the mass is heterogeneously T2 hyperintense with internal cystic changes; no flow voids are present; sagittal T1 demonstrates the craniocaudal extent

(e)



(f)

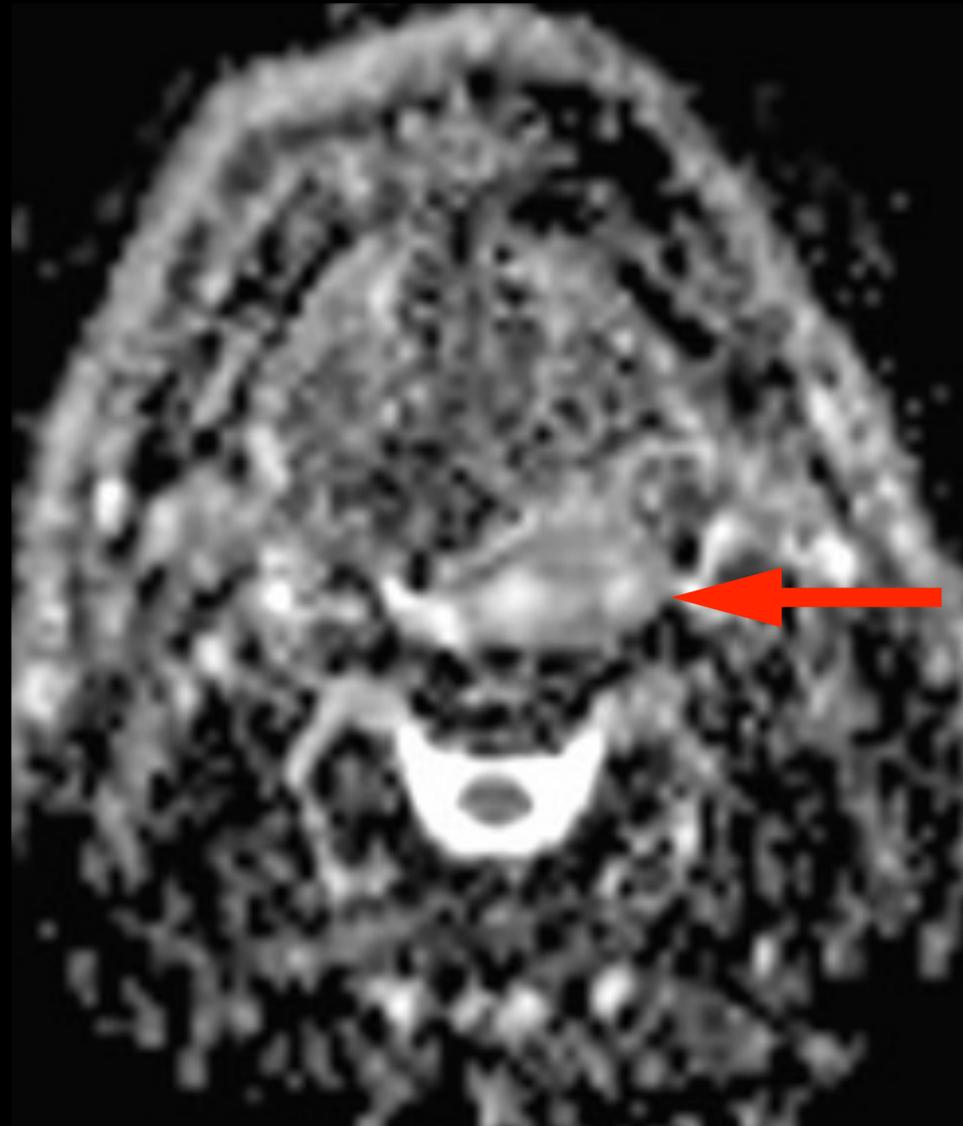


# Imaging

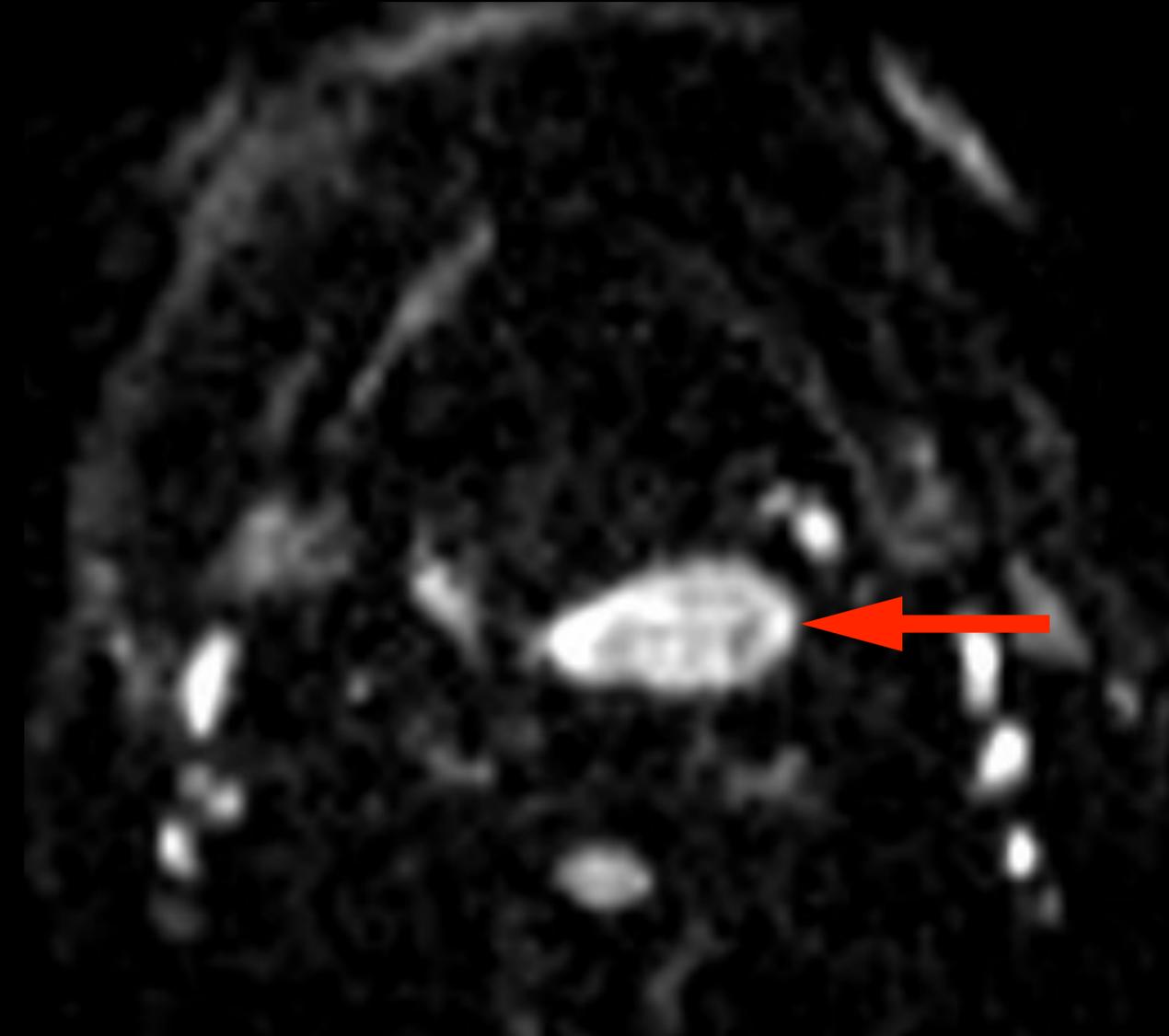
## MRI neck

- (g) Axial ADC
- (h) Axial B1000
- the mass heterogeneously restricts diffusion

(g)



(h)



# Management

- Transoral robotic resection: mass measured 4.5 x 2.5 x 3.0 cm; originated at inferior border of nasopharynx near left longus colli muscle; suspected to arise from the pharyngeal plexus
- Gross specimen: outer surface was smooth and glistening; sectioning through nodule revealed tan-white fleshy cut surfaces
- Immunohistochemistry: S100 (+)
- NG tube removed POD 3; pt tolerated mechanical soft diet

# Outcome

- Neck symptoms improved and patient able to tolerate PO intake
- Pharyngeal closure partially opened during coughing episode 1 week post-op  
—> healed w/ supportive care

# Take Home Points

- 25-45% of extracranial schwannomas occur in H&N
  - parapharyngeal space > oral cavity > nasal cavity > paranasal sinuses
  - \*\*\* <1% reported in retropharyngeal space (RS)
- in absence of major nerves in RS, it is speculated that schwannomas arise from pharyngeal plexus
- excluding malignant and vascular retropharyngeal tumors (e.g. glomus tumors and hemangiomas) important for surgical approach
- preoperative CT and/or MR angiography recommended for surgical planning

# Sources

Colreavy, M.P., Lacy, P.D. & Hughs, J. (2000) Head and neck schwannomas- a 10 years review. *J. Laryngol. Otol.*, **114**, 119-124.

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Thurnher D, Quint C, Pammer J, Schima W, Knerer B, Denk, DM. Dysphagia due to a large schwannoma of the oropharynx: case report and review of the literature. *Arch Otolaryngol Head Neck Surg* 2002;128:850–2.