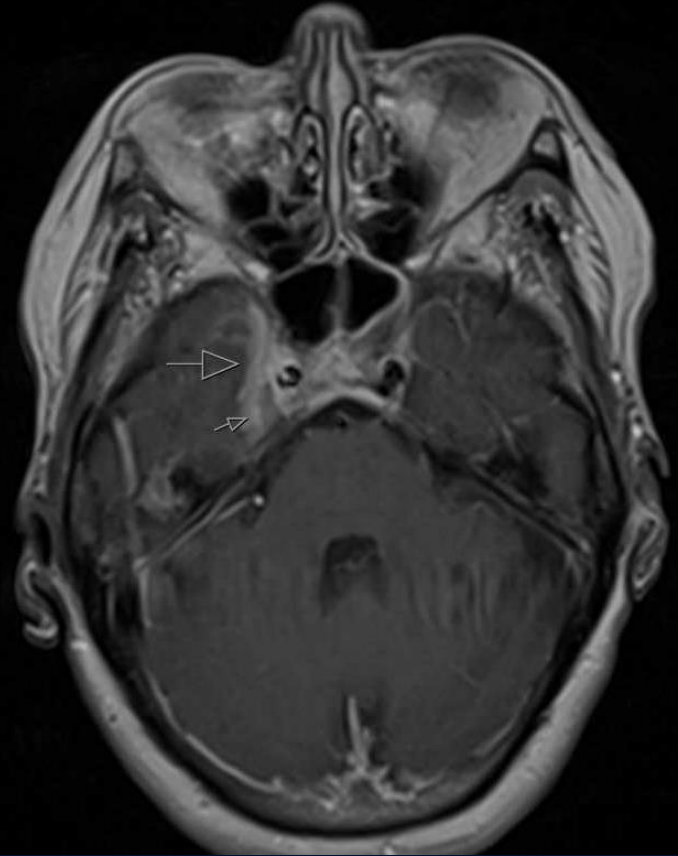
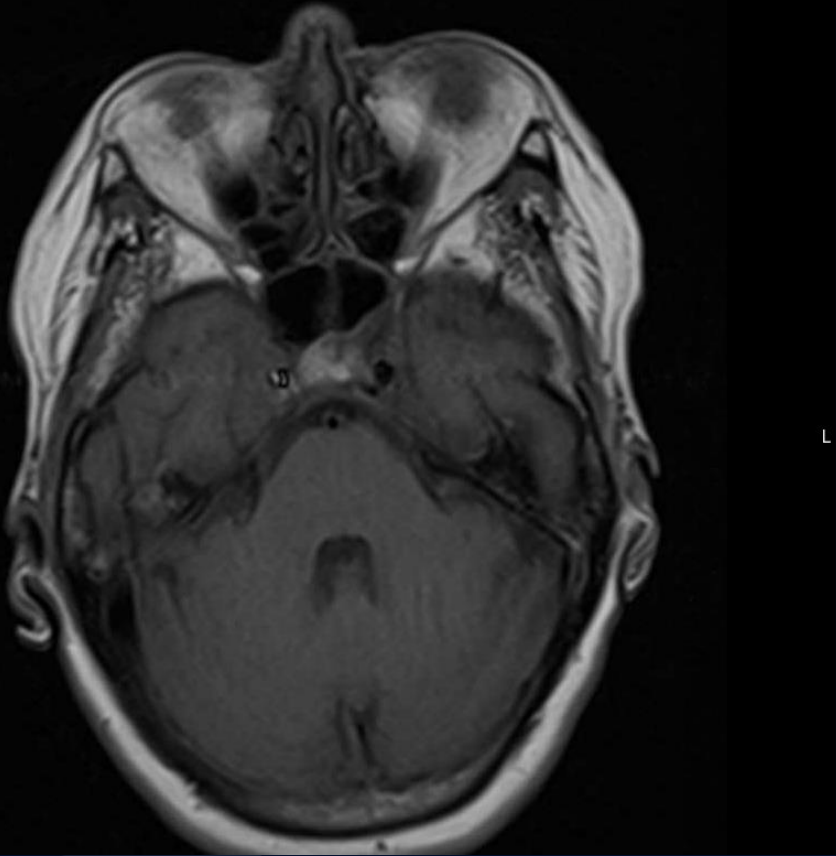


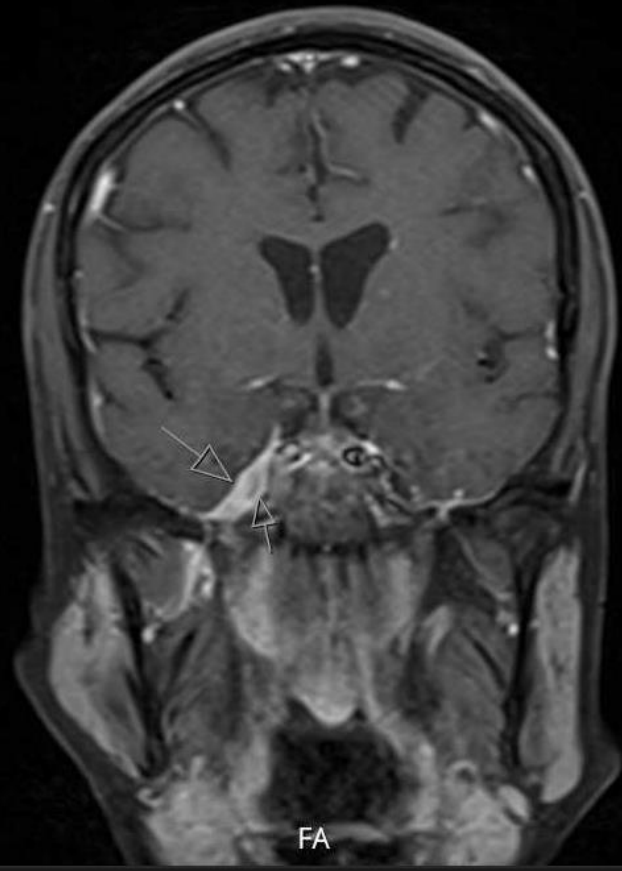
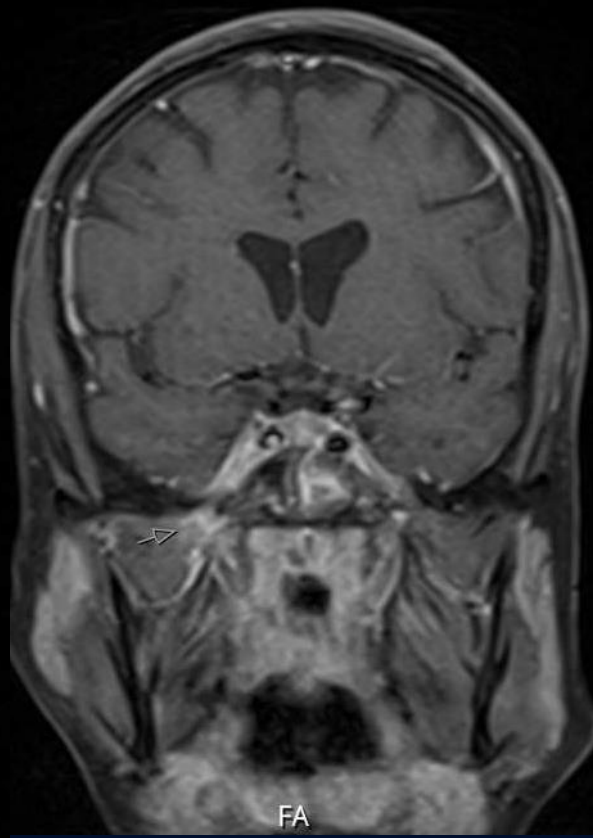
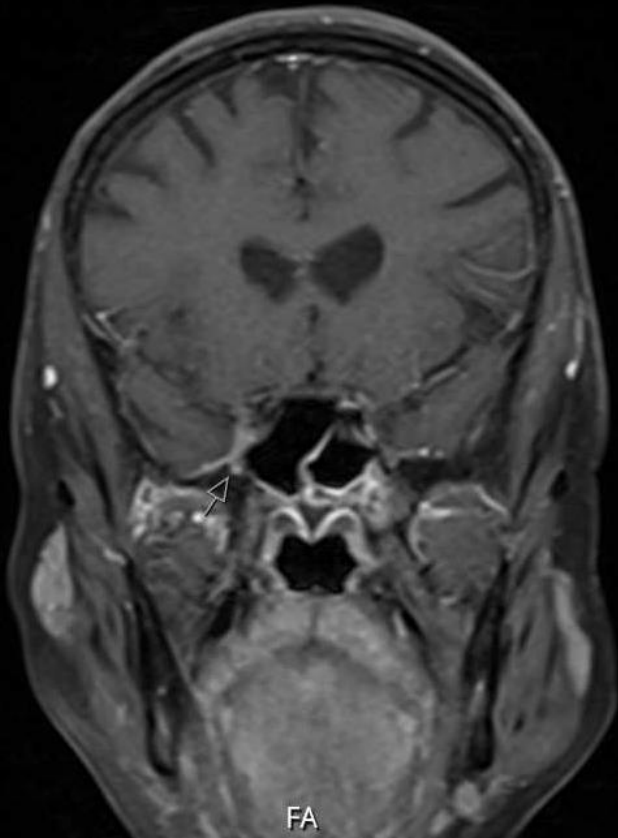
# 66-year-old female with diplopia, headache, and jaw pain

Rachael Cella, MS3

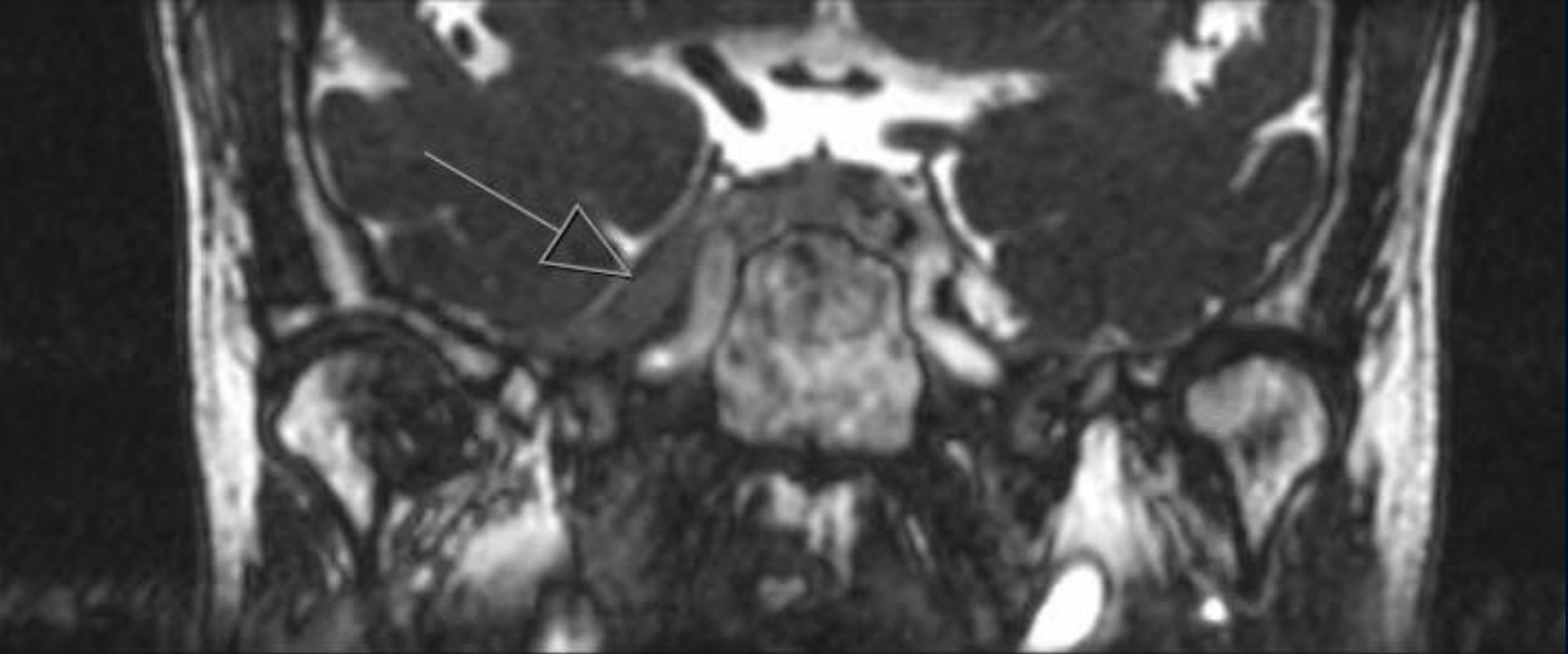
# T1 Pre and Post Gad



# T1 Fat Sat Post Gad



# T2 Coronal

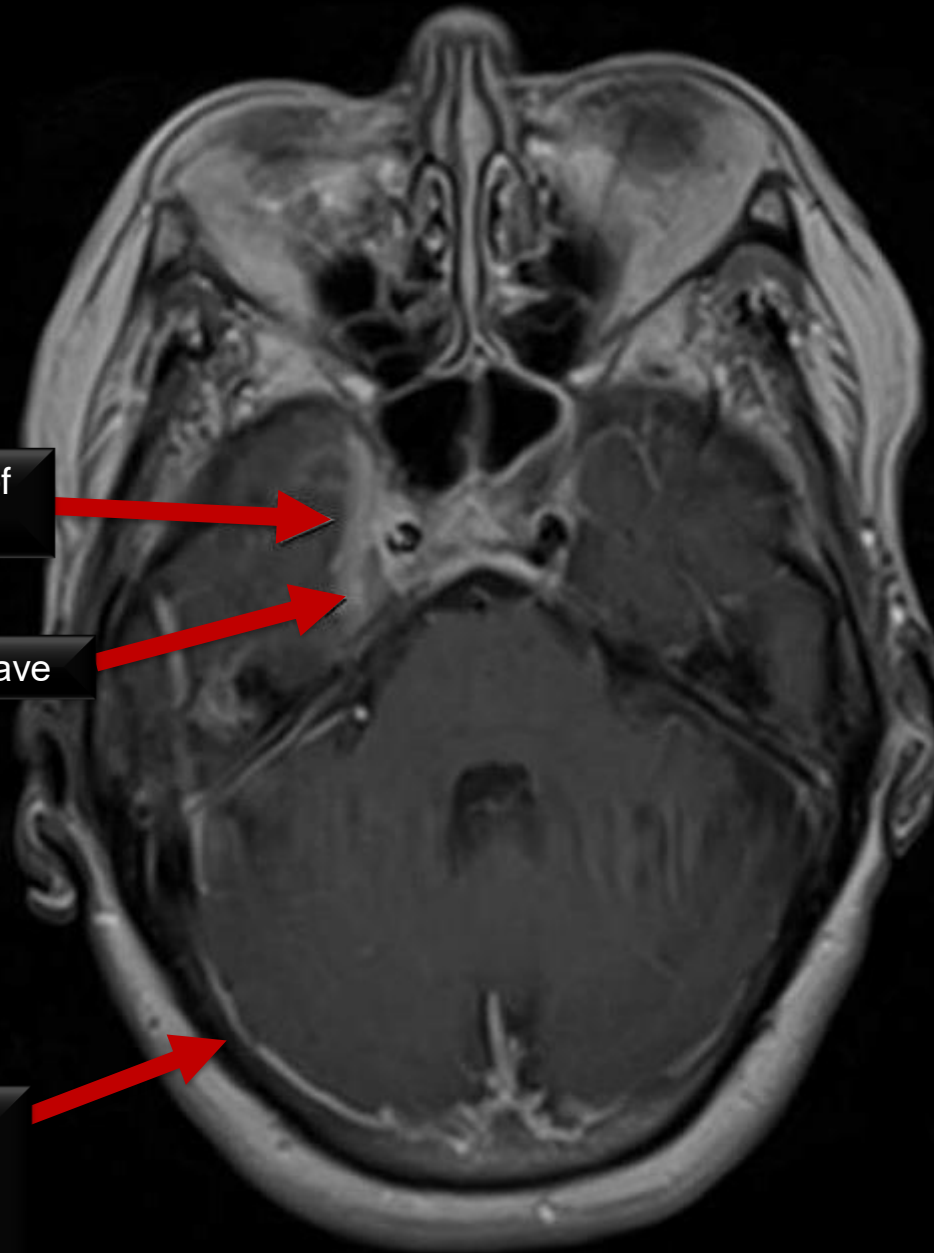




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# Tolosa-Hunt Syndrome

T1 Post GAD



Asymmetric enlargement of the right cavernous sinus

Right Meckel's cave

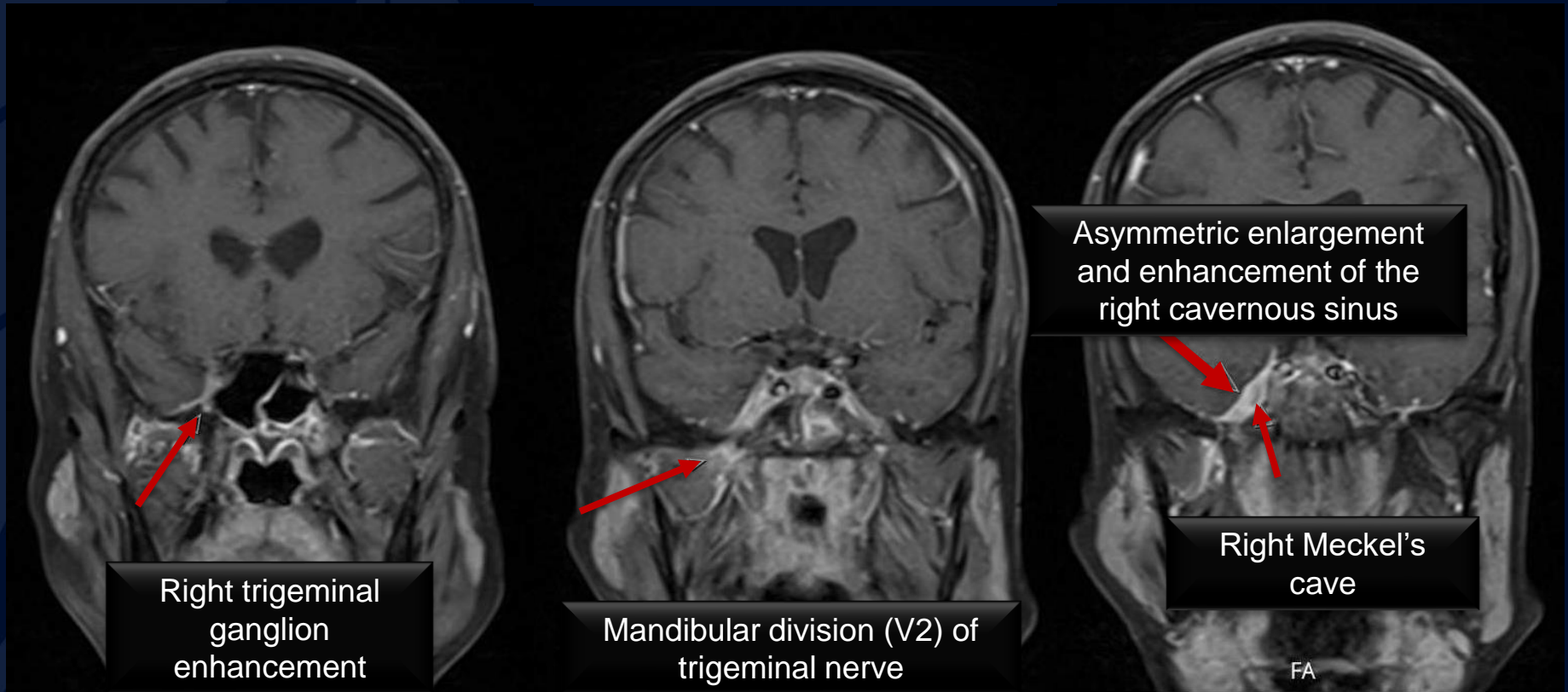
Asymmetric thickening (enhancement) of the right tentorium

PF

**UConn**  
**HEALTH**

RADIOLOGY

# T1 Fat Sat Post Gad





# T2



# Tolosa-Hunt Syndrome

- Rare with annual incidence of 1/1,000,000
- Unclear etiology, but likely involves nonspecific granulomatous inflammation in cavernous sinus and/or superior orbital fissure
- Diagnosis of exclusion
- Clinical features
  - ***Intense, unilateral periorbital pain &/or headache with paralysis or weakness of eye muscles***
  - Ophthalmoplegia ± ptosis, diplopia, proptosis, and/or diminished visual acuity
- Treatment
  - Steroids; if untreated, sx resolve in ~ 8 weeks

# Imaging Findings

- MRI brain with and without contrast – helps exclude other causes of pain on eye movements
  - Thickening of cavernous sinus because of the presence of abnormal soft tissue
    - T1-weighted: hypointense relative to fat, isointense relative to muscle
    - T2-weighted: isointense or hypointense relative to fat
    - enhancement with gadolinium contrast
  - Convexity of lateral wall of cavernous sinus
  - Focal narrowing of the intracavernous internal carotid artery

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