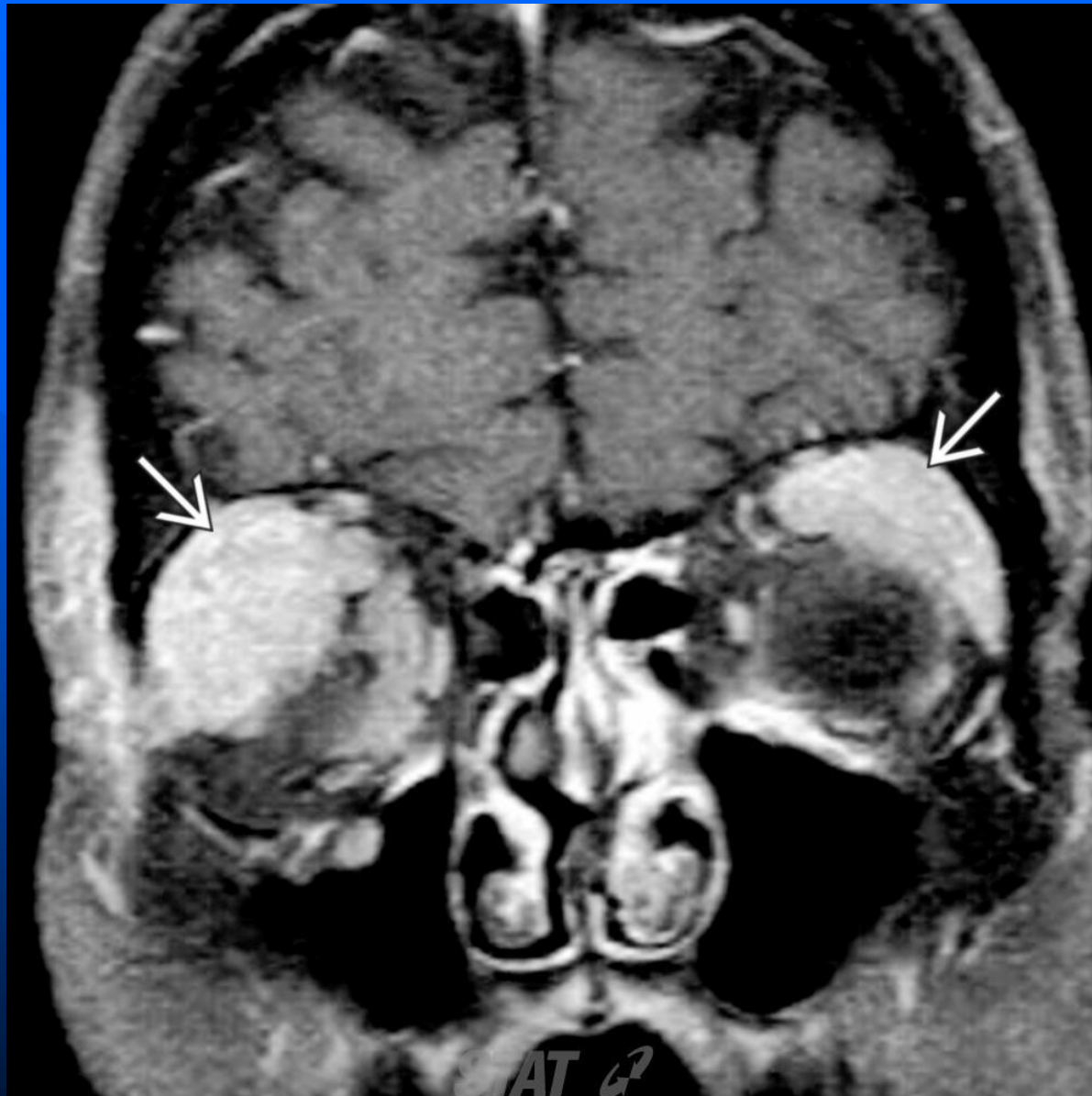# Orbital Lymphoproliferative Lesions

- Spectrum of lesions ranging from benign lymphoid hyperplasia to malignant lymphoma.
- Presentation: Insidious anterior orbital/eyelid swelling
- Long-term risk of developing systemic lymphoma
  - Histology and orbital site affect risk of systemic disease
- Lymphoid hyperplasia responsive to steroids
- Lymphoma responsive to radiation therapy

Imaging

- Solid, pliable, homogeneously enhancing tumor
  - Can involve any part of orbit; lacrimal predilection
- Mass with lobulated margins
  - Molds to adjacent structures in "plastic" fashion
- Mildly T2 hyperintense to muscle (high cellularity)
- Decrease ADC, particularly in true lymphoma
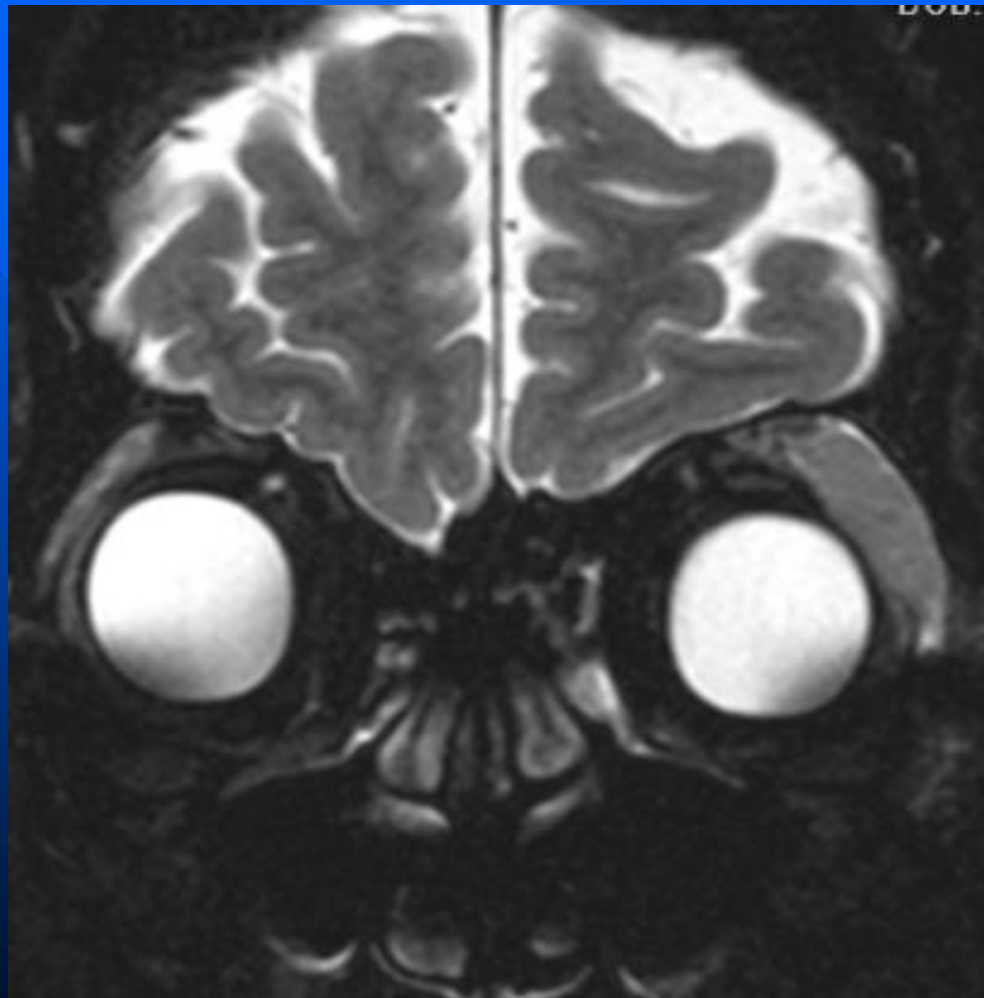- Moderate to marked homogeneous enhancement

Coronal T1 C+ FS MR shows bilateral, lobular, homogeneously enhancing lacrimal masses (white solid arrow). This is a common presentation for OLPL. The differential for this appearance includes sarcoidosis, Sjögren syndrome, and idiopathic inflammation.

Coronal T1 C+ MR shows a homogeneously enhancing extraconal MALT lymphoma involving the lacrimal gland with posterior extension along the lateral rectus (white solid arrow). Note the presence of intracranial suprasellar tumor (white open arrow).

Lacrimal lymphoma

Checklist

- **Consider**
  - Whole-body **staging** and **surveillance** are indicated because of risk of development of systemic lymphoma
  - Tumor location has significant impact on eventual risk of systemic lymphoma

- **Image Interpretation Pearls**
  - **Broad range** of imaging manifestations
    - » Carefully examine anterior compartment structures, including orbital septum, conjunctiva, and lids
    - » May involve any portion of orbit
  - Consider OLPL in differential for any orbital mass
  - Features that help distinguish benign hyperplasia from true lymphoma
    - » **Benign**: Well-defined, bilateral, flow void sign, higher enhancement ratio, sinusitis, less elderly
    - » **Lymphoma**: Irregular, unilateral, diffusion restriction, lower enhancement ratio, more elderly