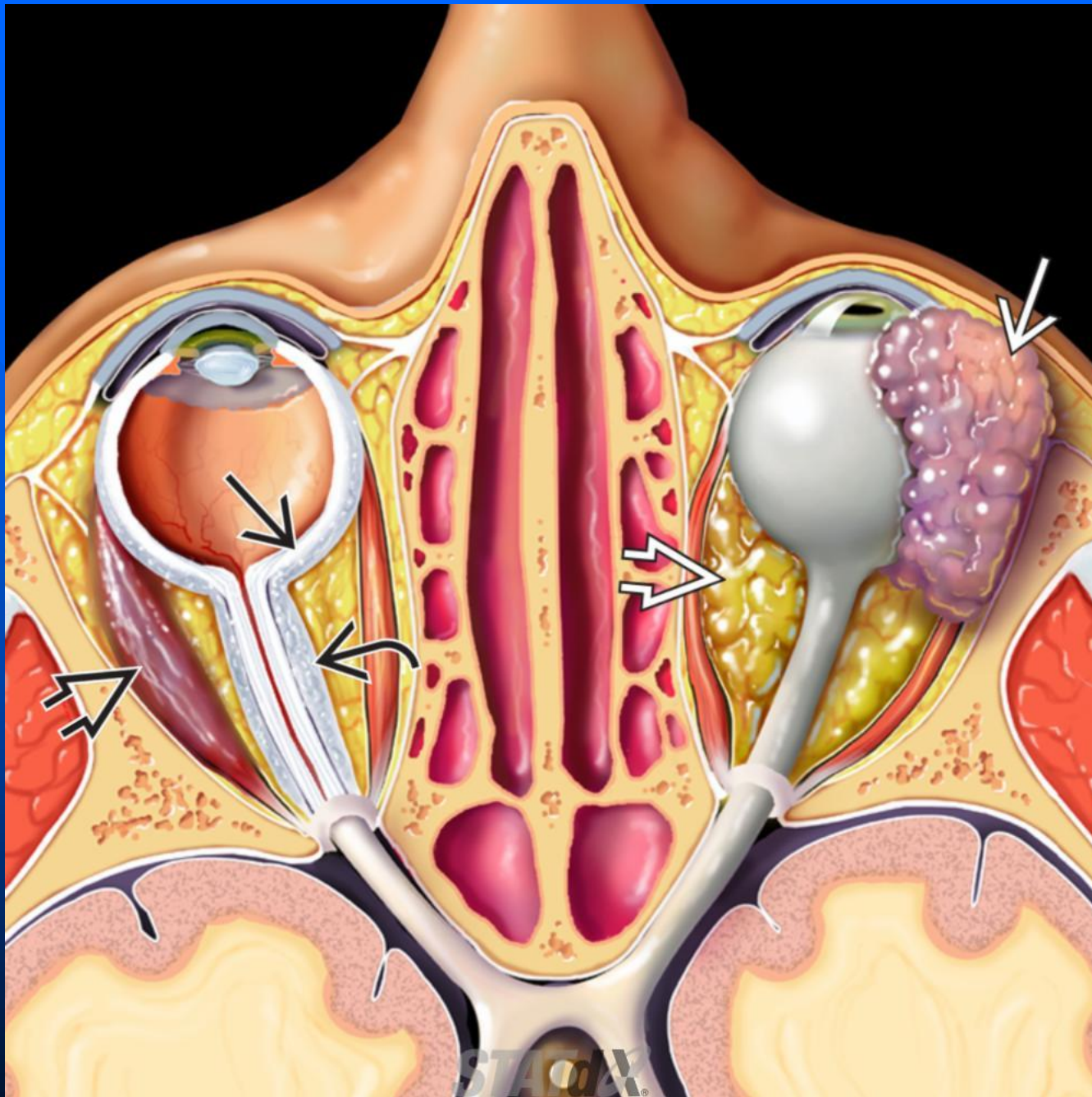


Idiopathic Orbital Inflammation (Pseudotumor)

- Nonspecific orbital inflammation, not due to any known etiology or systemic illness.
- Acute to subacute orbital pain, swelling, restricted motion, diplopia, proptosis, and impaired vision
- Common orbital disorder
- Steroid treatment effective in most patients

Imaging

- Poorly marginated, mass-like, or infiltrative enhancing inflammatory tissue involving any area of orbit
 - **Myositic** (extraocular muscles)
 - **Lacrimial** (lacrimal gland)
 - **Anterior** (globe, retrobulbar orbit)
 - **Diffuse** (multifocal intraconal \pm extraconal)
 - **Apical** (orbital apex, intracranial extension)
- Diffuse irregularity, muscle enlargement, and enhancement
- T2/STIR hypointense due to cellular infiltrate and fibrosis
 - Particularly in chronic, sclerosing, or IgG4 disease
- Best imaging tool: Contrast-enhanced MR with fat suppression
- Disease variants
 - Tolosa-Hunt: Through fissures into cavernous sinus
 - Sclerosing: More often bilateral, may extend into sinuses
 - IgG4: Predilection for lacrimal gland and nerves



Axial graphic depicts multifocal idiopathic orbital inflammation, including involvement of the extraocular muscles (black open arrow), orbital fat (white open arrow), lacrimal gland (white solid arrow), sclera (black solid arrow), and optic sheath (black curved arrow).



Coronal T1WI C+ FS MR demonstrates extensive orbital inflammation, with ill-defined enlargement and enhancement of the rectus muscles (white solid arrow), extraconal infiltration extending to the lacrimal gland (white open arrow), and intraconal enhancement partially surrounding the optic nerve (white curved arrow).

Orbital pseudotumor



Orbital pseudotumor



Abnormal right scleral thickening, associated with stranding in the orbital fat and mild thickening of the extraocular muscle tendon attachments. The right medial rectus muscle is slightly larger than the left.

DDX: lymphoma, Grave's disease, less likely metastatic disease

Orbital pseudotumor

