

EPISCLERITIS AND SCLERITIS

1. Episcleritis

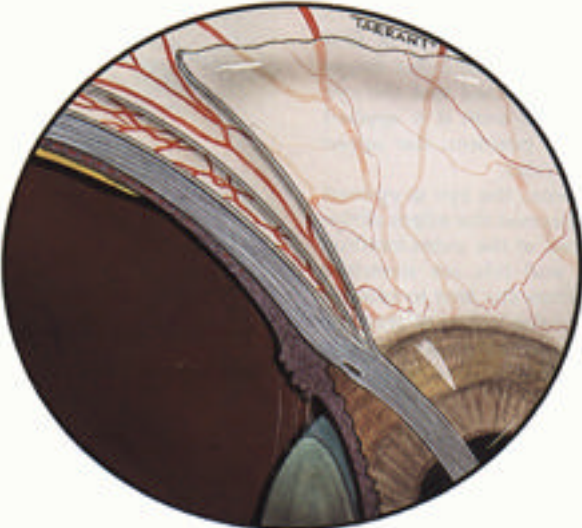
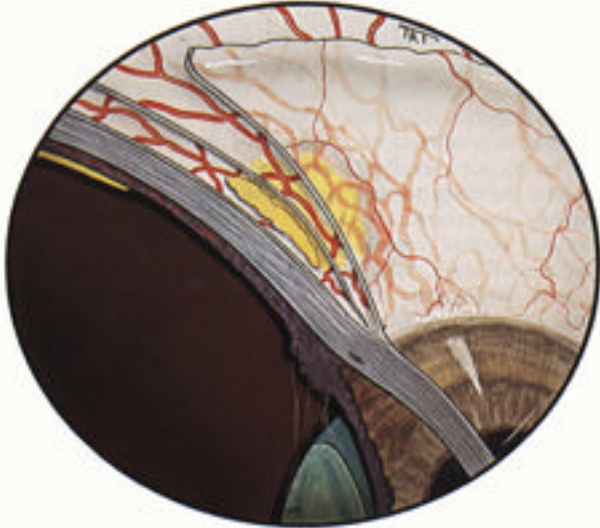
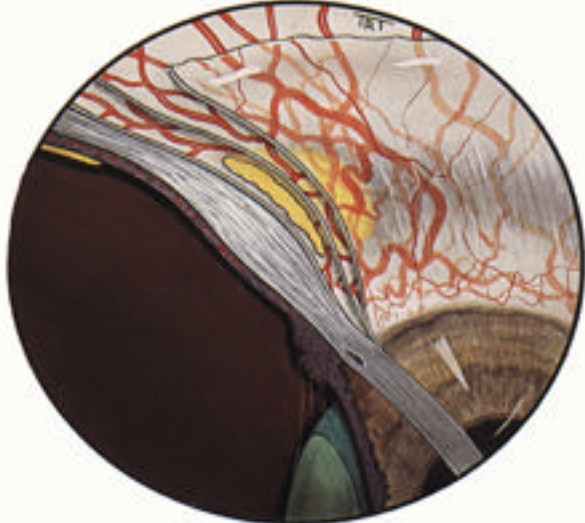
- Simple
- Nodular

2. Anterior scleritis

- Non-necrotizing diffuse
- Non-necrotizing nodular
- Necrotizing with inflammation
- Necrotizing without inflammation
(scleromalacia perforans)

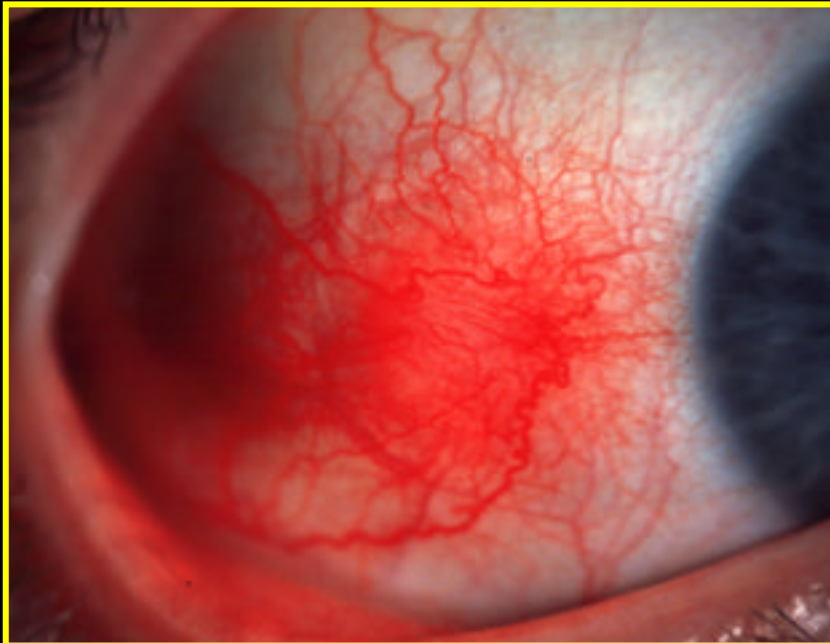
3. Posterior scleritis

Applied anatomy of vascular coats

Normal	Episcleritis	Scleritis
 A circular diagram of a normal eye cross-section. The sclera is white and smooth. The episclera is a thin layer over the sclera. The deep vascular plexus is visible as a network of red vessels adjacent to the sclera. The iris and lens are visible in the center.	 A circular diagram of an eye with episcleritis. The sclera is white and smooth. The episclera is thickened and inflamed, with a yellowish-orange color. The deep vascular plexus is visible as a network of red vessels adjacent to the sclera. The iris and lens are visible in the center.	 A circular diagram of an eye with scleritis. The sclera is thickened and inflamed, with a yellowish-orange color. The deep vascular plexus is visible as a network of red vessels adjacent to the sclera. The iris and lens are visible in the center.
<ul style="list-style-type: none">• Radial superficial episcleral vessels• Deep vascular plexus adjacent to sclera	<ul style="list-style-type: none">• Maximal congestion of episcleral vessels	<ul style="list-style-type: none">• Maximal congestion of deep vascular plexus• Slight congestion of episcleral vessels

Simple episcleritis

- Common, benign, self-limiting but frequently recurrent
- Typically affects young adults
- Seldom associated with a systemic disorder



Simple sectorial episcleritis



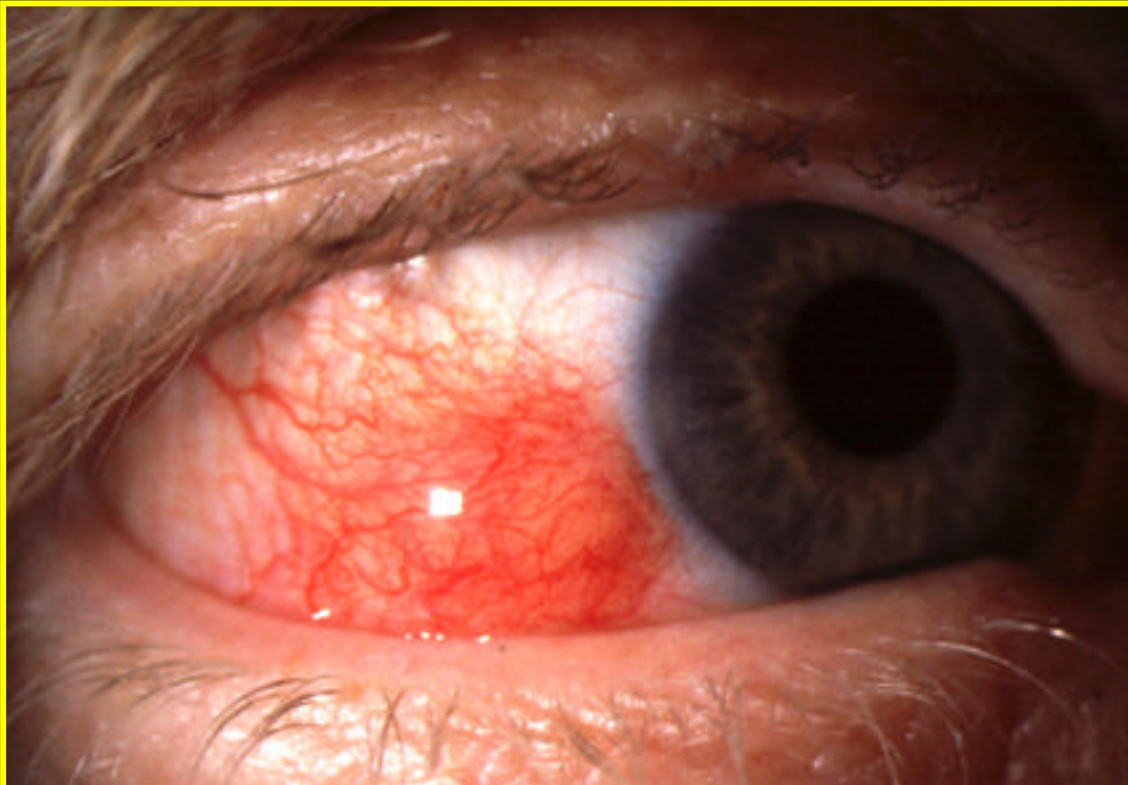
Simple diffuse episcleritis

Treatment

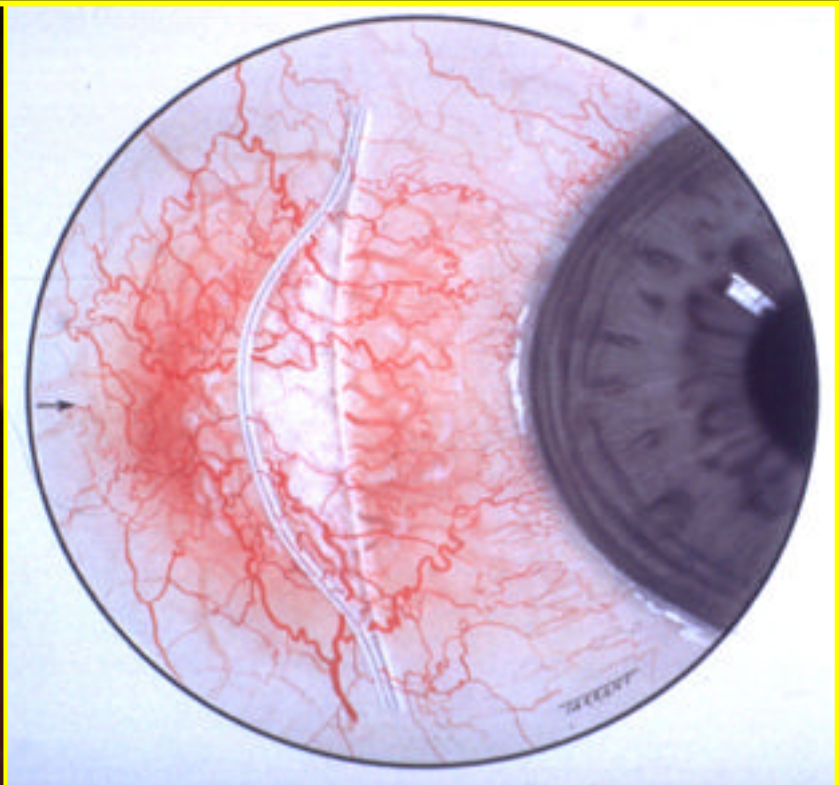
- Topical steroids
- Systemic flurbiprofen (00 mg tid if unresponsive

Nodular episcleritis

- Less common than simple episcleritis
- May take longer to resolve
- Treatment - similar to simple episcleritis



Localized nodule which can be moved over sclera



Deep scleral part of slit-beam not displaced

Causes and Systemic Associations of Scleritis

1. Rheumatoid arthritis

2. Connective tissue disorders

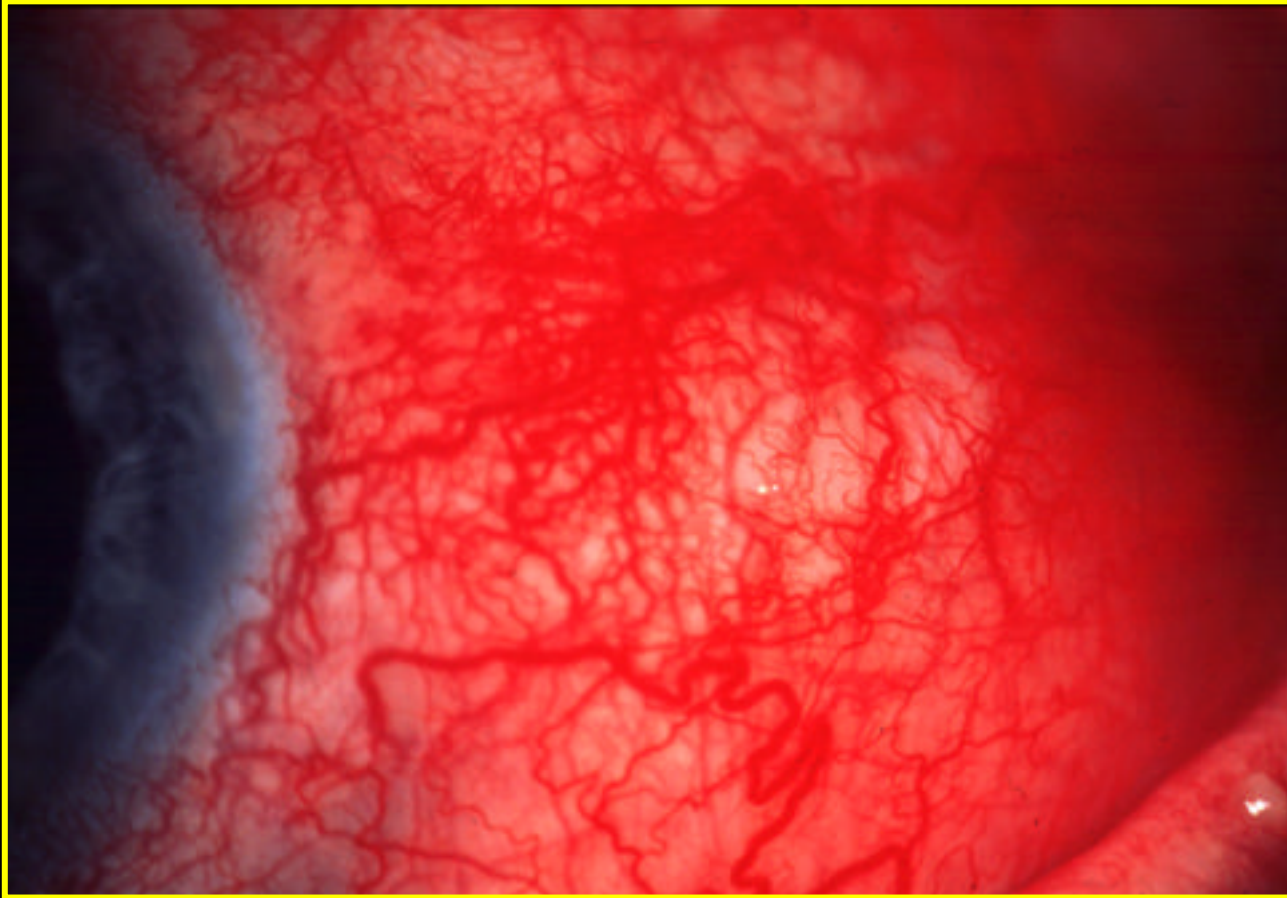
- **Wegener granulomatosis**
- **Polyteritis nodosa**
- **Systemic lupus erythematosus**

3. Miscellaneous

- **Relapsing polychondritis**
- **Herpes zoster ophthalmicus**
- **Surgically induced**

Diffuse anterior non-necrotizing scleritis

- Relatively benign - does not progress to necrosis
- Widespread scleral and episcleral injection

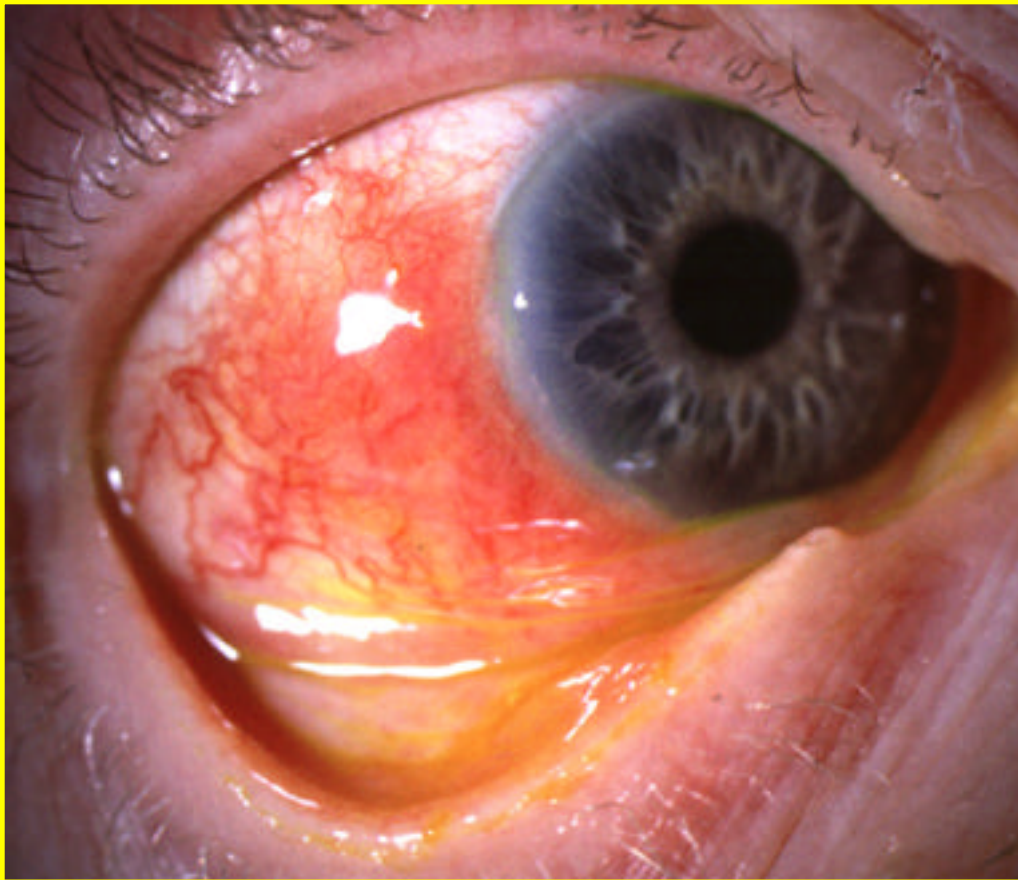


Treatment

- Oral NSAIDs
- Oral steroids if unresponsive

Nodular anterior non-necrotizing scleritis

More serious than diffuse scleritis



On cursory examination resembles nodular episcleritis



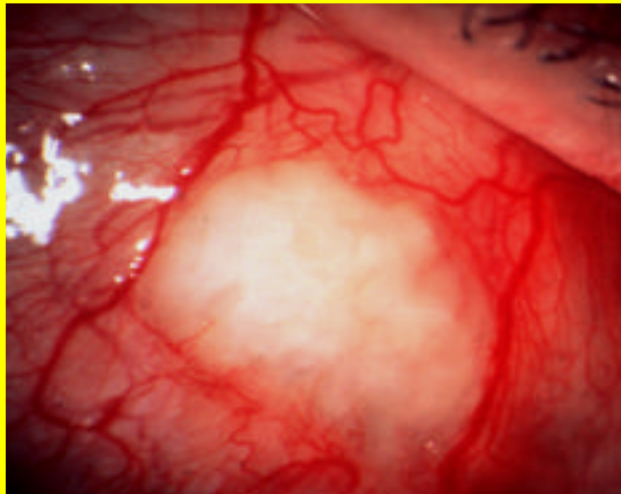
Scleral nodule cannot be moved over underlying tissue

Treatment - similar to diffuse non-necrotizing scleritis

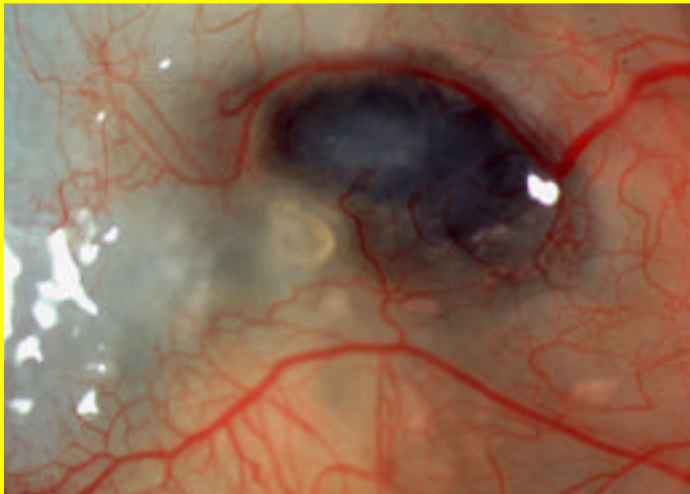
Anterior necrotizing scleritis with inflammation

- Painful and most severe type
- Complications - uveitis, keratitis, cataract and glaucoma

Progression



Avascular patches



Scleral necrosis and visibility of uvea



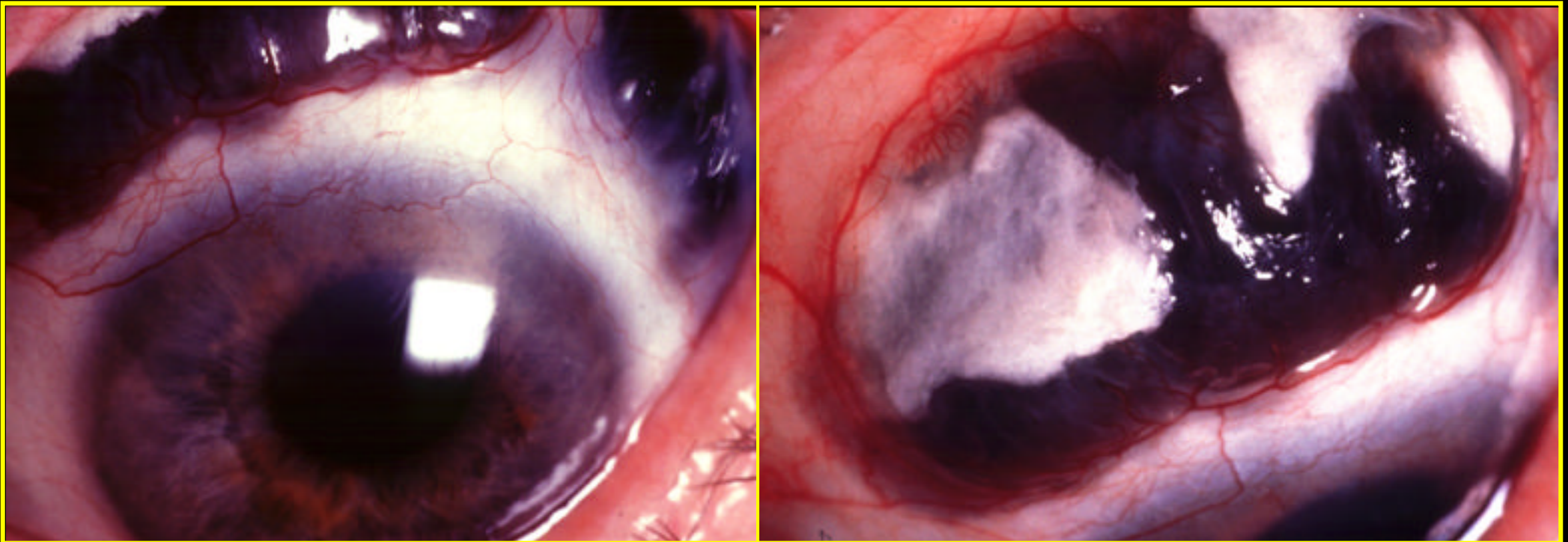
Spread and coalescence of necrosis

Treatment

- Oral steroids
- Immunosuppressive agents (cyclophosphamide, azathioprine, cyclosporin)
- Combined intravenous steroids and cyclophosphamide if unresponsive

Anterior necrotizing scleritis with inflammation (scleromalacia perforans)

- Associated with rheumatoid arthritis
- Asymptomatic and untreatable



Progressive scleral thinning with exposure of underlying uvea

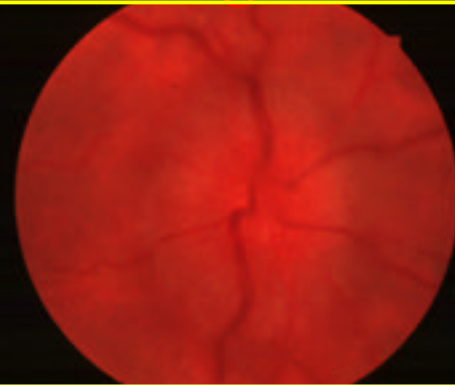
Posterior scleritis

- About 20% of all cases of scleritis
- About 30% of patients have systemic disease
- Treatment similar to necrotizing scleritis with inflammation

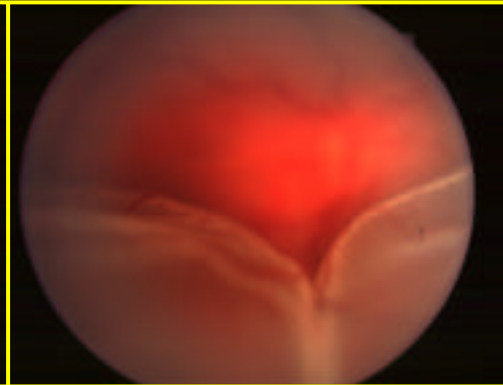
Signs



**Proptosis and
ophthalmoplegia**



Disc swelling



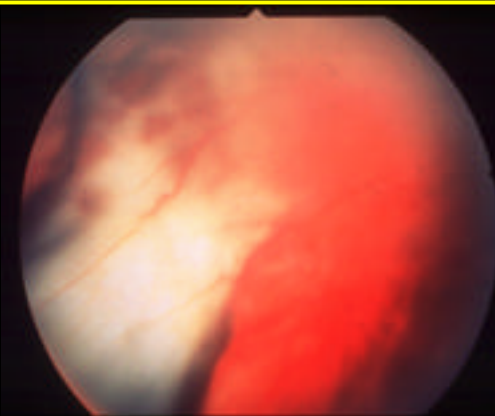
**Exudative retinal
detachment**



**Ring choroidal
detachment**



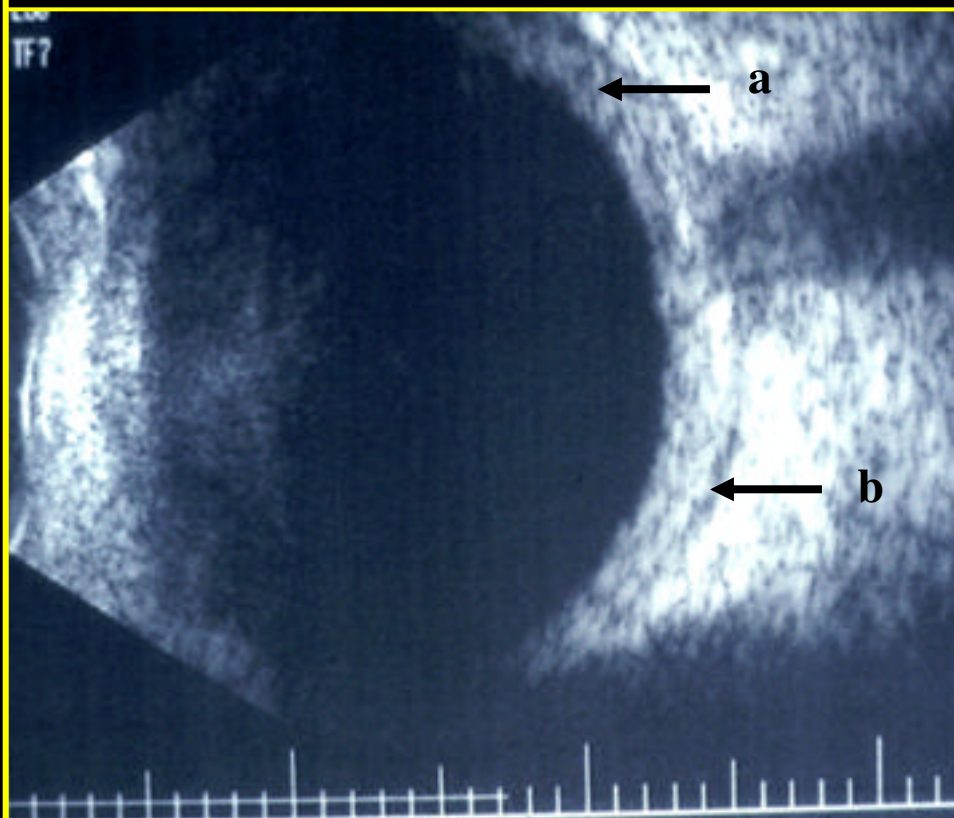
Choroidal folds



Subretinal exudation

Imaging in posterior scleritis

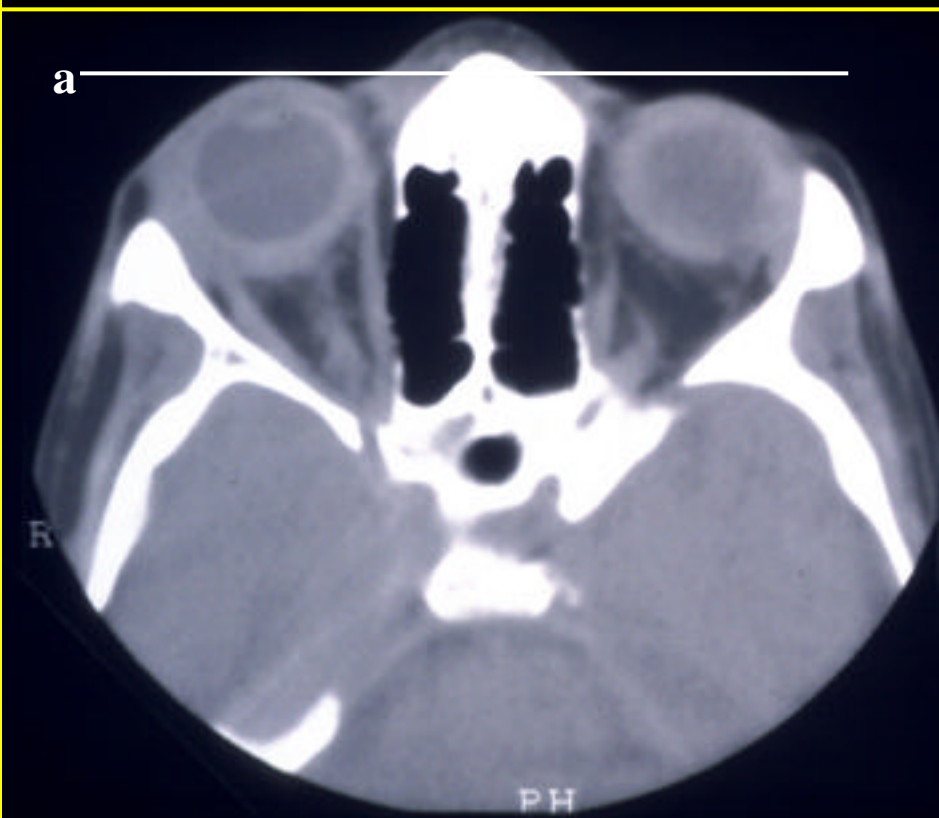
Ultrasound



a - Thickening of posterior sclera

b - Fluid in Tenon space ('T' sign)

Axial CT



Posterior scleral thickening