Phlyctenular Ulcers
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Etiology
- Delayed hypersensitivity to the re-exposure to bacterial antigens (most often Staphylococcus aureus [75% of cases] but was TB Mycobacterium tuberculosis [TB still big problem worldwide], poor hygiene & nutrition & poor public health conditions, most often in first 2 decades.
- Possibly an allergic response by the effected structure to some antigen to which it has become sensitized; occurring mainly in children and young adults (female > male)
- Phlycten– derived from the Greek word, phlyctaena, which means blister
- Common in Eskimo children

Symptoms
- Mild irritation, foreign-body sensation, tearing, mild pain, blepharospasm and photophobia (especially if cornea involved); rarely mucopurulent discharge
- Usually unilateral red eye: Inflammation of the paralimbal tissues
- History of similar episodes

Signs
- Conjunctival phlyctenule – Small (1-4 mm), pinkish white, avascular infiltrative nodule (composed of leukocytes) with sector hyperemia in the area, usually near the inferior limbus (especially the 4 and 8:00 position)
- If corneal phlyctenule, the phlyctenule starts as elevated, white nodule with sector dilation of conjunctival vessels at the limbus, may remain stationary or travel towards the center of cornea
- Phlyctenules tend to be large if active TB
- May be bulbar or tarsal

Course of phlyctenule is elevation, infiltration, ulceration, and resolution of nodule over 6-12 days: NaF1 staining
- Corneal scar is triangular with base at limbus and apex toward the central cornea with superficial neovascularization
- Old phlyctenular disease can cause Salzmann’s nodular degeneration
- Note- Absence of lucid interval

Differential Diagnosis
- Inflamed pinguecula
- Infectious ulcer
- Ocular rosacea
- Herpes simplex
- Marginal infiltrate.ulcer
**Treatment**

- History of TB or recent TB infection
- PPD with anergy panel plus chest x-ray if suspect
- Depending on severity of symptoms and signs, treatment may vary from lubricants to topical antibiotic-steroids (Blephamide or Tobradex, Zylet) or steroids (Pred Mild or Pred Forte) qid x 4 days then rapid tapering
  - New steroids: 1% Vexol, 0.5% Lotemax, Flarex, Ellone
  - Artificial tears plus topical NSAIDS if pain
  - Oral doxycycline 100mg PO bid in severe cases

- Antibiotic ointment to eyelids (bacitracin ointment hs)
- Lid hygiene
- Rule out TB in patient and family
- Rule out other causes of marginal keratitis
- Permanent anterior stromal scar will remain with neovascularization