General Characteristics

- Asians, Africans, & South Americans considered to be epidemic in these countries; in USA, Native Americans and rarely in the trachoma belt of Arkansas, Missouri, West Virginia and Kentucky
- Combination of poverty, overcrowded conditions, lack of hygiene, dryness, dusty, shortage of water for face washing
- Chronic and with a variable clinical course
- Chronic with spontaneous exacerbations and remissions, red and painful eyes

continued

- It is still a major cause of preventable blindness
- Around the world 700m. cases (1/7 of world population) and about 200m. with blindness
- The common fly is the major vector in the infection-reinfection cycle
- Initial infection is usually during childhood

Signs

- Discharge and blepharoconjunctival appearance
  - Mild, mucopurulent discharge with acute onset, red eyes
  - Chronic immature to mature follicles of the upper tarsal plate, may become soft and rupture
  - Conjunctival scarring (fine, stellate, linear, horizontal) of upper tarsal plate- broad scars- Arlt’s line
  - Follicles along superior limbus- unique feature
- **Cornea**
  - Punctate epithelial keratitis, marginal infiltrates (ulcers) along superior limbus
  - Gross superior fibrovascular pannus
  - Herbet’s pits: scarring of superior cornea (limbal depression) due to rupturing of limbal follicles, pathognomonic of trachoma
  - Indemic areas, the presence of two of the typical signs: upper tarsal follicles, pannus, or limbal follicles is sufficient for diagnosis

- Blinding complications of trachoma are usually the results of severe KCS, entropion, trichiasis, corneal ulcerations and secondary bacterial infections
- Stage of trachoma may last months to years
- Lymph nodes are enlarged and tender
**Etiology**

- *Chlamydial trachomatis* - Serotypes A, B, Ba, and C
- Spread from hand to eye contact with infected material - flies, hands, towels, water
- Serious public health problem in many underdeveloped areas of the world
- Leading cause of preventable blindness in the world

**Treatment**

- Systemic tetracycline 250 mg or erythromycin 500 mg PO qid for 3-4 weeks, doxycycline 100 mg bid for 3-4 weeks or Azithromycin 250 mg qid x 1 da.
- Topical erythromycin, tetracycline-polymyxin ointment bid/qid for 4-6 weeks
- Cosmetic surgery on lids for severe entropian, trichiasis and severe lid scarring
Staging of Trachoma

1. Small follicles on the conjunctiva
2. Mature follicles with diffuse infiltration and papillary hypertrophy
3. Conjunctival scarring and active inflammation
4. Inactive infection and scar tissue