I. Introduction to IK
   A. At-risk population:
      1. CL wearers
      2. Injury
      3. Immunocompromised status
      4. Ocular medications
      5. Comorbid ocular surface pathology
   B. Frequency
      1. US – 30K per year
      2. 1.5 million per year in developed world
   C. Implications of IK
   D. Pathological processes
   E. Examination
      1. History
      2. Thorough slit lamp examination of anterior segment
      3. Culturing
         a. When to culture
         b. How to culture
         c. Different media/purpose

II. IK Subtypes
   A. Bacterial
      1. Gram-positive: appearance/characteristics
         a. Staphylococcus
         b. MRSA
         c. Streptococcus
         d. Medical therapy
      2. Gram-negative: appearance/characteristics
         a. Pseudomonas
         b. Medical therapy
      3. Mycobacteria: appearance/characteristics
         a. Nocardia
         b. Medical therapy
      4. Use of steroids in bacterial keratitis
   B. Viral
      1. Herpesvirus family
      2. Herpes Simplex
         a. Background
         b. Incidence
         c. Latency period
         d. Reactivation
         e. Presentations:
i. Epithelial
ii. Stromal, non-necrotizing
iii. Stromal, necrotizing
iv. Endothelial
f. Treatment
   i. Topical antiviral
   ii. Oral antiviral
   iii. Steroids

3. Herpes Zoster
   a. Background
   b. Appearance
   c. Treatment
      i. Oral antivirals
      ii. Oral steroids
      iii. Other medications/support

4. Adenovirus
   a. Background
   b. Appearance
   c. Diagnostic tools
   d. Treatment
      i. Supportive
      ii. Topical antivirals/antiseptics
      iii. Steroids

C. Fungus
   1. At-risk populations
   2. Appearance
   3. Culturing
      a. Fusarium
      b. Candida
   4. Treatment
      a. Topical antifungals
      b. Oral antifungals
      c. Surgical involvement

D. Parasitic
   1. At-risk populations
   2. Appearance
   3. Diagnostic clues
   4. Treatment
      a. Corneal scraping
      b. PHMB
      c. Chlorhexidine
      d. Neosporin
      e. Oral antifungals
      f. Steroids

III. Other information
A. Diagnostic Tools
   1. Confocal microscopy
   2. Anterior segment OCT

B. Treatment evolution
   1. Crosslinking for IK
   2. Amniotic membrane in IK