Adenoviral Conjunctivitis

Transmitted via...

... close contact with ocular/respiratory secretions

... contaminated swimming pools
Adenoviral Conjunctivitis

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools

? ? ?
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis

Pharyngoconjunctival Fever (PCF)

Epidemic Keratoconjunctivitis (EKC)

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
- **Pharyngoconjunctival Fever (PCF)**
- **Epidemic Keratoconjunctivitis (EKC)**

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools

Why isn't acute hemorrhagic conjunctivitis on this list?

Because it's caused by an enterovirus or coxsackievirus, not adenovirus.
Adenoviral Conjunctivitis

Why isn’t acute hemorrhagic conjunctivitis on this list?
Because it’s caused by an enterovirus or coxsackievirus, not adenovirus.

Three ocular syndromes

- Follicular conjunctivitis
- Pharyngoconjunctival Fever (PCF)
- Epidemic Keratoconjunctivitis (EKC)

Transmitted via...
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

- Follicular conjunctivitis
- Pharyngoconjunctival Fever (PCF)
- Epidemic Keratoconjunctivitis (EKC)

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools

Why isn't acute hemorrhagic conjunctivitis on this list?
Because it's caused by an enterovirus or coxsackievirus, not adenovirus
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
  - Mild, transient disease
  - Duration, severity

- **Pharyngoconjunctival Fever (PCF)**

- **Epidemic Keratoconjunctivitis (EKC)**

*Transmitted via...*
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
  - *Mild, transient* disease

- **Pharyngoconjunctival Fever (PCF)**

- **Epidemic Keratoconjunctivitis (EKC)**

*Transmitted via...*
*...close contact with ocular/respiratory secretions...fomites...contaminated swimming pools*
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
  - **Mild, transient** disease
  - management?

- **Pharyngoconjunctival Fever (PCF)**

- **Epidemic Keratoconjunctivitis (EKC)**

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis
- Mild, transient disease
- No care sought

Pharyngoconjunctival Fever (PCF)

Epidemic Keratoconjunctivitis (EKC)

Transmitted via...
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
  - Mild, transient disease
  - No care sought

- **Pharyngoconjunctival Fever (PCF)**
  - Serotypes #,#

- **Epidemic Keratoconjunctivitis (EKC)**

*Transmitted via...*
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis
- Mild, transient disease
- No care sought

Pharyngoconjunctival Fever (PCF)
- Serotypes 3, 7

Epidemic Keratoconjunctivitis (EKC)

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
  - Mild, transient disease
  - No care sought

- **Pharyngoconjunctival Fever (PCF)**
  - Serotypes 3, 7
  - Follicular conjunctivitis +
  - Ha +
  - Pharyngitis +

- **Epidemic Keratoconjunctivitis (EKC)**

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis
--Mild, transient disease
--No care sought

Pharyngoconjunctival Fever (PCF)
--Serotypes 3, 7
--Follicular conj’itis + fever + HA + pharyngitis

Epidemic Keratoconjunctivitis (EKC)

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
  - Mild, transient disease
  - No care sought

- **Pharyngoconjunctival Fever (PCF)**
  - Serotypes 3, 7
  - Follicular conj’itis + fever + HA + pharyngitis
  - Looks like the flu

- **Epidemic Keratoconjunctivitis (EKC)**

Transmitted via...
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis
--Mild, transient disease
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Epidemic Keratoconjunctivitis (EKC)

Transmitted via...
...close contact with ocular/respiratory secretions
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...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
--Mild, transient disease
--No care sought

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--Serotypes 3, 7
--Follicular conj’itis + fever + HA + pharyngitis
--Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**

*Transmitted via...*
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools

Of the adenoviral syndromes, only EKC has significant K involvement.
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conj’itis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes #,#,#

**Transmitted via...**
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis
--Mild, transient disease
--No care sought

Pharyngoconjunctival Fever (PCF)
--Serotypes 3, 7
--Follicular conj’itis + fever + HA + pharyngitis
--Looks like the flu

Epidemic Keratoconjunctivitis (EKC)
--Serotypes 8, 19, 37

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conj’titis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

- **Follicular conjunctivitis**
  - Mild, transient disease
  - No care sought

- **Pharyngoconjunctival Fever (PCF)**
  - Serotypes 3, 7
  - Follicular conjunctivitis + fever + HA + pharyngitis
  - Looks like the flu

- **Epidemic Keratoconjunctivitis (EKC)**
  - Serotypes 8, 19, 37
  - May be preceded by URTI
    - (URTI = upper respiratory tract infection)

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis

- Mild, transient disease
- No care sought

Pharyngoconjunctival Fever (PCF)

- Serotypes 3, 7
- Follicular conj’itis + fever + HA + pharyngitis
- Looks like the flu

Epidemic Keratoconjunctivitis (EKC)

- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in amount of time

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conj’itis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

Follicular conjunctivitis
- Mild, transient disease
- No care sought

Pharyngoconjunctival Fever (PCF)
- Serotypes 3, 7
- Follicular conj’itis + fever + HA + pharyngitis
- Looks like the flu

Epidemic Keratoconjunctivitis (EKC)
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
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**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st URTI
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
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- Serotypes 3, 7
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- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  - 1st URTI
  - 1 week

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  - 1st URTI
  - 2nd

Transmitted via...
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st URTI
  1 week
  2nd Severe follicular conjunctivitis

*Transmitted via...*
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

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- Serotypes 3, 7
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**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st URTI
  1 week
  2nd Severe follicular conjunctivitis

What will pts complain of at this stage?

Transmitted via...
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
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- Serotypes 3, 7
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- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days

What will pts complain of at this stage?
Tearing, foreign-body sensation, photophobia

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools

Preauricular lymphadenopathy

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools

1st URTI
1 week

2nd Severe follicular conjunctivitis
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  - 1st URTI
  - 2nd Severe follicular conjunctivitis

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools

What will pts complain of at this stage?
- Tearing, foreign-body sensation, photophobia

Slit-lamp exam of the anterior segment will reveal...
- Punctate epithelial keratopathy
- Sub-conj heme
- Conjunctival membranes

What nonocular sign might be found?
- Preauricular lymphadenopathy
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st URTI
  2nd Severe follicular conjunctivitis

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- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

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- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  - 1st URTI
  - 2nd Severe follicular conjunctivitis

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Transmitted via...
- Close contact with ocular/respiratory secretions
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Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conj’itis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  - 1st URTI
  - 2nd Severe follicular conjunctivitis

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What will pts complain of at this stage?
Tearing, foreign-body sensation, photophobia

Slit-lamp exam of the anterior segment will reveal…
- Punctate epithelial keratopathy
- Sub-conj heme
- Conjunctival membranes

What nonocular sign might be found?
Preauricular lymphadenopathy

Transmitted via...
- ...close contact with ocular/respiratory secretions
- ...fomites
- ...contaminated swimming pools
Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st URTI
  1 week
  2nd Severe follicular conjunctivitis
  1-2 weeks
  3rd Two words

Transmitted via...
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  - 1st URTI
  - 2nd Severe follicular conjunctivitis
  - 3rd Subepithelial infiltrates (SEI)

Transmitted via...
- close contact with ocular/respiratory secretions
- fomites
- contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  - 1st URTI
  - 1 week
  - 2nd Severe follicular conjunctivitis
  - 1-2 weeks
  - 3rd Subepithelial infiltrates (SEI)

(Cause photophobia and ↓ VA; can persist for )

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conjunctivitis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st URTI
  ↓ 1 week
  2nd Severe follicular conjunctivitis
  ↓ 1-2 weeks
  3rd Subepithelial infiltrates (SEI)

(Cause photophobia and ↓ VA; can persist for years)

Transmitted via...
...close contact with ocular/respiratory secretions
...fomites
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

**Follicular conjunctivitis**
- Mild, transient disease
- No care sought

**Pharyngoconjunctival Fever (PCF)**
- Serotypes 3, 7
- Follicular conj’itis + fever + HA + pharyngitis
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Serotypes 8, 19, 37
- May be preceded by URTI
- 2nd eye involved in 3-7 days
- Stages:
  1st URTI
  2nd **Severe follicular conjunctivitis**
  3rd **Subepithelial infiltrates (SEI)**

Management:
- ATs, cool compresses
- Membranes: Peel ’em; +/- steroids
- SEI: +/- Steroids for 1 week

Transmitted via...
...close contact with ocular/respiratory secretions...
fomites...
...contaminated swimming pools
Adenoviral Conjunctivitis

Three ocular syndromes

1. **Follicular conjunctivitis**
   - Mild, transient disease
   - No care sought

2. **Pharyngoconjunctival Fever (PCF)**
   - Serotypes 3, 7
   - Follicular conjunctivitis + fever + HA + pharyngitis
   - Looks like the flu

3. **Epidemic Keratoconjunctivitis (EKC)**
   - Serotypes 8, 19, 37
   - May be preceded by URTI
   - 2nd eye involved in 3-7 days
   - Stages:
     1st **URTI**
     - 1 week
     2nd **Severe follicular conjunctivitis**
     - 1-2 weeks
     3rd **Subepithelial infiltrates (SEI)**

- Management
  - Supportive: ATs, cool compresses
  - Membranes: Peel 'em; +/-steroids
  - SEI: +/-Steroids

**Transmitted via...**
- Close contact with ocular/respiratory secretions
- Fomites
- Contaminated swimming pools
Adenoviral Conjunctivitis

**Follicular conjunctivitis**
- Mild disease, rarely seen in clinic

**Pharyngoconjunctival Fever (PCF)**
- Looks like the flu

**Epidemic Keratoconjunctivitis (EKC)**
- Bilateral follicular conj’itis + petechial hemorrhages + conj membranes + corneal involvement + lymphadenopathy

**Adenoviral conjunctivitis: tl;dr**