

VIROLOGY LECTURE

(Adenoviruses)

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Adenoviruses

- **Family:** Adenoviridae
- Unenveloped
- Spherical nucleocapsid
- 12 – fibers, one at each vertex
- ds-DNA genome
- Replicate in the nucleus
- 49-distinct types, grouped into 6-subgenera (A-F)

Diseases associated with adenoviruses:

- Pharyngitis
- Acute respiratory disease
- Pneumonia
- Pharyngoconjunctival fever
- Keratoconjunctivitis
- Gastroenteritis
- Genitourinary tract infection
 - Cervicitis
 - Urethritis
 - Acute hemorrhagic cystitis

Transmission:

- Respiratory droplets and saliva
- Fecal-oral route
- Hand to eye transfer
- Venereal

Age:

- All age groups

I.P.

- 4 – 8 days

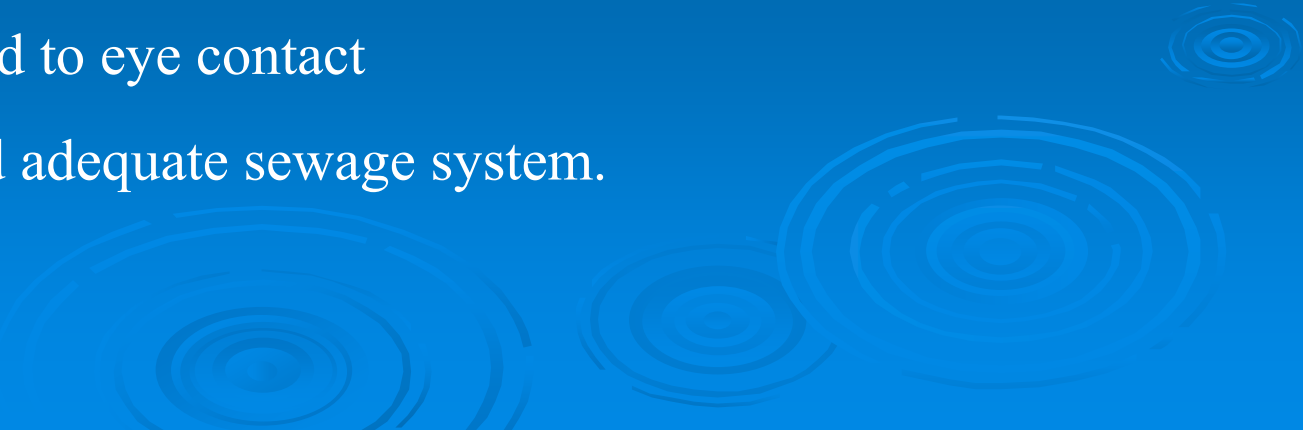
Prognosis:

- Self limiting disease
- Recovery is usual

Prevention:

- No vaccine is available yet.

Prevention Measures:

- Washing hands with soap and water after sneezing and coughing
 - Washing hands with soap and water before eating and preparing food.
 - Washing hands after toilets and changing diapers.
 - Chlorination of drinking water and swimming pools.
 - High hygiene practice in ophthalmology practice
 - Proper sterilization of ophthalmology instruments.
 - Avoid hand to eye contact
 - Proper and adequate sewage system.
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Treatment:

- There is no specific anti-viral drug therapy
- Treatment is supportive, by treating symptoms

Lab. Diagnosis

- Direct demonstration of the virus in NPA, stool and conjunctival scraping.
 - Isolation of the virus in tissue culture, followed by identification of the isolated virus.
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