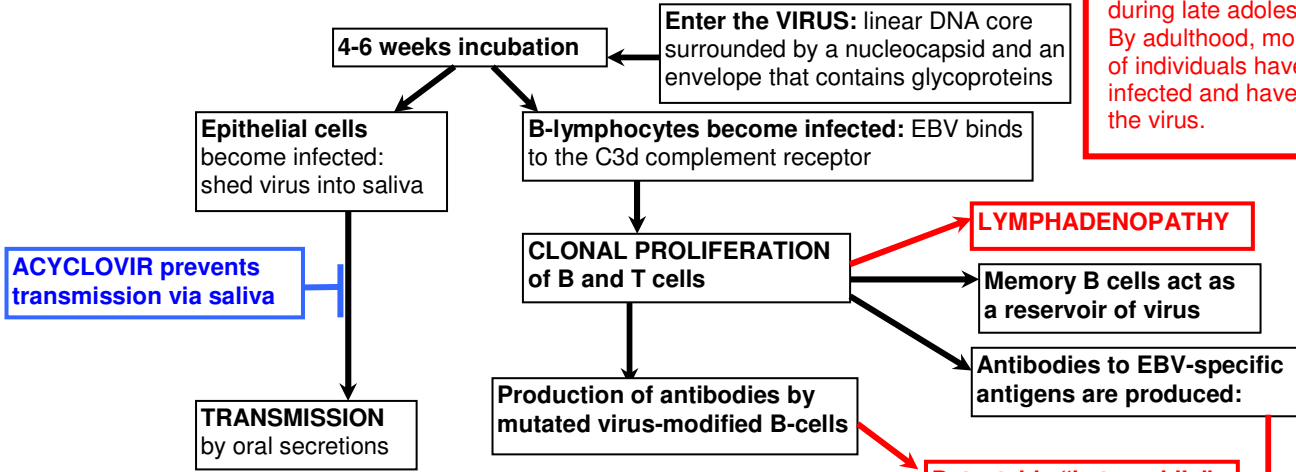


# Epstein-Barr Virus and Infectious Mononucleosis

EBV =. Most common in early childhood, with a second peak during late adolescence. By adulthood, more than 90% of individuals have been infected and have antibodies to the virus.



## PRESENTATION:

### infants and young children:

- asymptomatic
- maybe mild pharyngitis with or without tonsillitis.

### Adolescents:

#### Prodrome:

- Fatigue
  - Malaise
  - Myalgia
- 1-2 weeks

#### Then...

- Fever (low-grade, for 1st 2 weeks)
- sore throat, + tonsil exudate
- lymphadenopathy- tender and symmetric
- *splenomegaly* during the second and third weeks.
- Rarely, a rash.

Symptoms last 2-4 weeks

Detectable "heterophile" IgM antibody in 40% of patients within 1 week and for the next 3 months = **MONOSPOT test**  
heterophil antibodies agglutinate horse red cells

Detectable antiviral antibodies: in 3-4 weeks, in 70%  
**Viral Capsid Antigen (VCA)** for 1-3 months  
**Early Antigen D (EA-D)** for 3-6months (marker of chronic infection)

## DIFFERENTIALS:

- cytomegalovirus, (commonest)
- *Toxoplasma*,
- HIV,
- herpesvirus 6,
- hepatitis viruses
- rubella
- lymphoma / leukaemia
- drug hypersensitivity

## LAB FINDINGS

### FBC: mildly elevated WCCs

- differential that demonstrates greater than 50% lymphocytes,
- OR an absolute lymphocyte count greater than 4500,
- OR an elevated lymphocyte count with greater than 10% atypical lymphocytes

### LFT: AST + ALP elevation in 90%

Bilirubin rises in 40%

### MONOSPOT test: the most common and specific test to confirm the diagnosis of IM.

Tests for heterophile antibody. The monospot test is 75% sensitive and 90% specific compared with EBV-specific antibodies

### SPECIFIC ANTIBODY tests are more expensive and time-consuming

used for patients with suspected acute EBV infection who lack heterophile antibodies and for patients with atypical infections

## MANAGEMENT: Rest, Analgesia, Antipyrexia.

Avoid excess physical activity. You might rupture your bloated spleen!

If airways get obstructed by Waldeyer's ring of lymph nodes, use prednisolone.

Antiviral therapy is of absolutely no use, quoth EBM

## COMPLICATIONS:

**Splenic rupture + airway compromise** is the main worry in the short term.

Also reported: EBV meningitis, acute transverse myelitis or peripheral neuritis; hemolytic anaemia, hepatitis, glomerulonephritis, monoarthritis, pneumonia and psychosis.

