Final Diagnosis

EBV hepatitis

EBV hepatitis

- Varies from asymptomatic to self-limited hepatitis to acute liver failure (rarely)
- Typically, hepatocellular hepatitis that is mild with ALT < 1000
  - Most often presents with other classic symptoms of EBV infectious mononucleosis but can present without these
  - 70-90% of primary EBV with elevated ALT and AST
  - Jaundice present in 5-10% of cases
  - Less common to have mixed or cholestatic injury in EBV hepatitis but does occur
  - Mostly self-limited and improve with supportive care
  - Only 1% of ALF cases in the U.S. attributed to EBV
- Accounts 1-4% of adult immunocompetent patients with acute hepatitis in developed countries
- Splenomegaly present in up to 50% and hepatomegaly in 10% of adults with primary EBV with infectious mononucleosis.

Table 1. Clinical Features of 36 Patients with Primary EBV Hepatitis

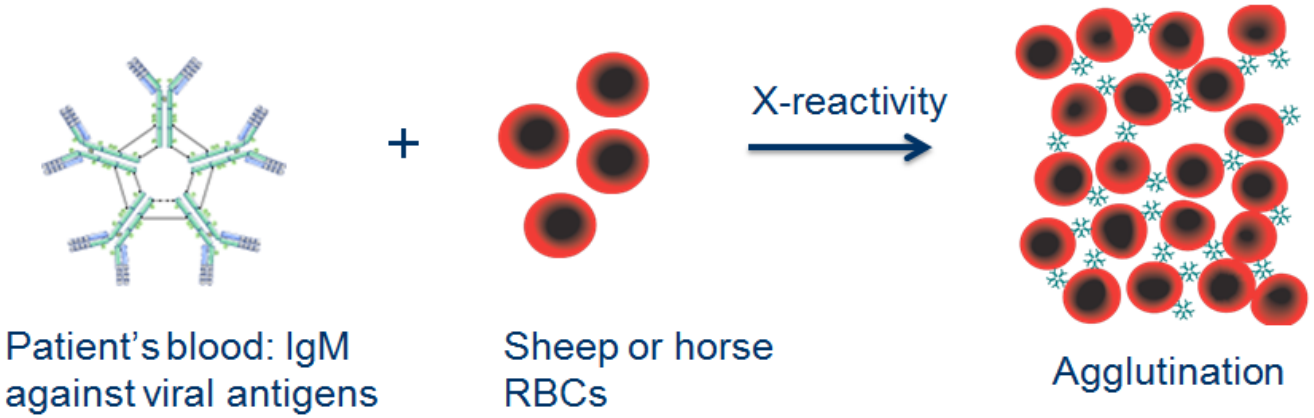
Symptoms and signs	No. of patients (%)
Fever	30 (83.3)
High fever (>39.5°C)	19 (52.8)
Abdominal pain	8 (22.2)
Vomiting	4 (11.1)
Rash	3 (8.3)
Icteric sclera	2 (5.6)
Cervical Lymphadenopathy	28 (77.8)
Tonsillar exudate	16 (44.4)
Nasal stuffiness	13 (36.1)
Hepatomegaly	11 (30.6)
Splenomegaly	10 (27.8)
Eyelid swelling	10 (27.8)

EBV, Epstein-Barr virus.

Source: Reddy et al. *Gastroenterology Clinics of North America*, 2020

Monospot Testing

- Gold standard testing is considered EBV specific antibodies, BUT require blood draw
- Monospot tests for specific heterophile antibodies produced by the immune system in response to EBV infection.
- When antibodies are present, exposure to equine erythrocytes lead to clumping and therefore is a positive test.
- Peak heterophile antibodies are seen from 2-6 weeks form infection so you can get false negatives with testing too early.



Monospot test characteristics

- Sensitivity could be between 70-90%, depending on when in the disease course it's taken. Sensitivity is poor in children under 4.
- Generally, specificity is high (95%). But false positives can occur with CMV, HIV, SLE, Rubella and HSV
- Low levels of heterophile antibodies may persist for 9 months to 1 year after resolution of symptoms

Stuempfig ND, Seroy J. Monospot Test. 2022 Aug 8. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan–. PMID: 30969561.

Lymphomatoid Papulosis

- Recurrent, pruritic, papulonodular skin eruptions with CD30+ lymphoid proliferation of atypical T cells seen on histopathology

- Chronic skin eruptions that typically regress on their own within weeks to months

- Treated with topical steroids or methotrexate in more symptomatic cases

- Lifelong elevated risk of mycosis fungoides, primary cutaneous anaplastic large cell lymphoma, or Hodgkin lymphoma

- Require lifelong surveillance for development of cutaneous or systemic lymphoma (recommended total body skin exam every 12 months for those with mild or inactive disease)