

UCV

CASE 20

ID/CC	A 15-year-old female complains of malaise, fatigue, and loss of appetite for the past week.
HPI	She also complains of mild fever and sore throat . Her boyfriend recently experienced similar symptoms that lasted approximately 3 weeks.
PE	VS: mild tachycardia; low-grade fever (38.2°C). PE: firm, discrete, tender, nonmatted cervical lymphadenopathy and pharyngitis with marked erythema and a diffuse exudate; petechiae at junction of hard and soft palate ; no hepatomegaly but mild soft splenomegaly .
Labs	CBC: leukocytosis with > 50% lymphocytes and monocytes. [Fig. 20] PBS: > 10% atypical lymphocytes . Monospot test for heterophil antibodies positive ; specific EBV antibodies (EA, VLA, EBNA) also positive.
Pathogenesis	The causative agent is Epstein-Barr virus (EBV) , a B-lymphotrophic human herpesvirus; it is transmitted primarily by salivary contact (as in kissing) and shed intermittently by all seropositive (clinical and subclinical) individuals. Infectious mononucleosis (IM) is defined as the triad of pharyngitis, fever, and lymphadenopathy combined with heterophil antibodies and atypical lymphocytosis . A similar disease syndrome may be produced by other infections, such as toxoplasmosis, CMV, and HIV.
Epidemiology	Approximately 50% of the world's population has experienced a primary EBV infection before adolescence. Early infections are usually mild and subclinical, but a second wave of infection occurs at adolescence or

INFECTIOUS DISEASE

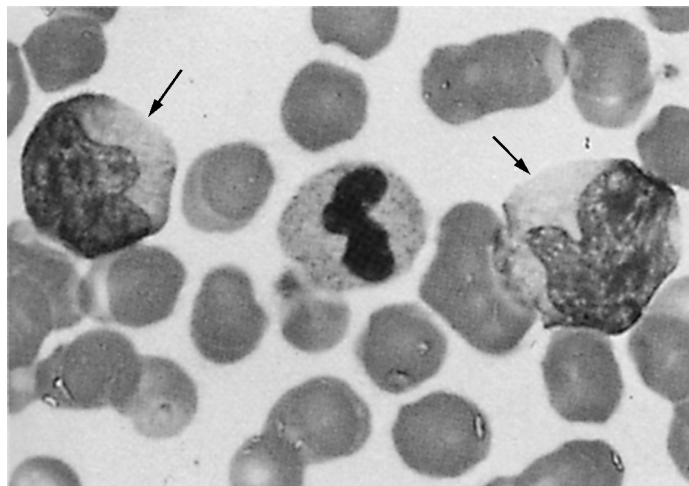


Figure 20

continued

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adulthood that accounts for most cases of IM. The peak incidence of IM is 14 to 16 years for girls and 16 to 18 years for boys. EBV is associated with **nasopharyngeal carcinoma**, **Burkitt's lymphoma**, certain types of **B-cell lymphomas** (especially in immunosuppressed individuals), and hairy leukoplakia in AIDS patients.

Management

Supportive care, adequate bed rest. **Glucocorticoids** may hasten the resolution of pharyngitis and are indicated for airway obstruction, severe thrombocytopenia, CNS involvement, or hemolytic anemia. **Acyclovir**, **ganciclovir**, and **α -interferon** are potent inhibitors of EBV replication and halt oropharyngeal shedding; however, clinical benefits are minimal. Avoid contact sports for 6 to 8 weeks owing to the risk of splenic rupture. Also avoid antibiotics, particularly ampicillin, as it may cause a skin rash that can be a diagnostic clue to EBV infections.

Complications

Complications include hemolytic anemia, thrombocytopenia, Guillain-Barré syndrome, encephalitis, and splenic rupture with trauma. Airway obstruction may result from pharyngeal adenopathy. There is a strong association with Burkitt's lymphoma and increasing evidence that immunosuppressed individuals and bone-marrow allograft recipients may be predisposed to B-cell lymphoma.

TOP SECRET