

Conditions of the Blood and Lymphatic System

1. Who is usually affected with chronic lymphocytic leukemia (CLL)?

2. What is the onset of CLL like?

3. What are the symptoms of CLL?

4. What will you see on CBC and peripheral blood smear in a patient with CLL?

5. Which age group is most affected with chronic myelogenous leukemia (CML)?

6. What is the prognosis for CML?

7. What are the symptoms of CML?

8. What is found in nearly 80% of cases of CML?

9. What is in the DDX for leukemia?

10. How are all leukemias differentiated?

11. What age group tends to be affected by Hodgkin's Disease?

12. How is Hodgkin's Disease affected by alcohol consumption?

13. What are the signs and symptoms of Hodgkin's Disease?

14. In a lateral view CXR what does "filling of the retrosternal space" mean?

15. How does Hodgkin's lymphoma spread?

16. What is the one of the first signs after onset of Hodgkin's Disease?

17. How is a diagnosis of Hodgkin's Disease made?

18. What is a sign of Hodgkin's Disease on chest x-ray?

19. What are the symptoms of Non-Hodgkin's lymphoma?

20. Which is the most common of the 2 types of lymphoma?

21. What age group is most affected in Non-Hodgkin's lymphoma?

22. What is in the DDX for Non-Hodgkin's lymphoma?

23. Which type of lymphoma tends to be more localized?

24. Which type of lymphoma skips lymph nodes?

25. What are the main subtypes of Non-Hodgkin's Lymphoma?

26. What are the common signs and symptoms of Multiple Myeloma?

27. What might you see on labs in a patient with Multiple Myeloma?

28. What will you see on urinalysis in a patient with Multiple Myeloma?

29. What will you see on bone x-rays in a patient with Multiple Myeloma?

30. What is in the DDX for Multiple Myeloma?

31. What is Babesiosis?

Answers

1. Usually 50–70 years of age. Most common in males 2:1
2. Insidious onset
3.
 - (1) LAO
 - (2) Predisposition to repeated infections
 - (3) Mucocutaneous bleeding
 - (4) Splenomegaly and hepatomegaly
 - (5) Systemic symptoms: weakness, fatigue, mild pallor, night sweats
 - (6) May have autoimmune hemolytic anemia and hemorrhage
4.
 - (1) Moderate anemia
 - (2) ↓Platelets
 - (3) ↑Lymphocytes
 - (4) Peripheral blood smear: **Smudge cells**
5. Usually onset at 30–50 years of age
6. 3 phases: 1: Chronic, often undiagnosed, can last 3-5 years, 2: Accelerated phase followed by 3: Blast crisis: usually ends in death
7.
 - (1) Systemic symptoms: fatigue, weakness, anorexia, fever, night sweats
 - (2) Abdominal fullness
 - (3) Splenomegaly
 - (4) Blast crisis: bone pain, fever, malaise, bleeding tendency
8. Philadelphia chromosome (9:22)
9.
 - (1) Infection: TB, EBV, CMV
 - (2) Lymphoma
 - (3) Multiple myeloma
 - (4) Leukemoid reaction
10. Bone marrow aspiration
11. Young adults: peaks at 15–30 and again after 50
12. There is intense pain in affected areas with any alcohol consumption
13.
 - (1) Systemic sx: Weight loss, night sweats, low grade cyclical fever
 - (2) ↑↑↑Pruritus
 - (3) Painless, palpable lymphadenopathy
14.
 - (1) Heart is enlarged
- (2) Aortic aneurysm
- (3) Mediastinal mass
15. It spreads predictably to nearby nodes and then systemically
16. Cervical or mediastinal LAO with a single hard, non-mobile, non-tender node
17. By the presence of **Reed-Sternberg cells** found on lymph node biopsy
18. Hilar or mediastinal widening
19.
 - (1) Rubbery, discrete, non-tender LAO in inguinal or cervical chains (other nodes can be affected)
 - (2) Most have multiple areas of involvement
 - (3) Systemic symptoms: fatigue, weight loss, night sweats
20. Non-Hodgkin's is more common
21. Incidence increases with age
22.
 - (1) Leukemia
 - (2) Hodgkin's Disease
 - (3) Mononucleosis
 - (4) Sarcoidosis
23. Hodgkin's Disease
24. Non-Hodgkin's
25.
 - (1) B-cell Lymphoma 90% of cases
 - (2) T-cell Lymphoma 10% of cases
 - (3) NK-cell Lymphoma (rare, less than 1%)
26.
 - (1) Recurrent bacterial infections
 - (2) Bone pain
 - (3) Anemia
 - (4) Osteolytic lesions
 - (5) Hypercalcemia
 - (6) Renal failure
27. Pancytopenia with a low reticulocyte count, elevated ESR, abnormal coagulation. Peripheral blood smear can show Rouleau formation
28. Proteinuria - Bence Jones proteins
29. Punched out lesions
30.
 - (1) Metastatic carcinoma
 - (2) Lymphoma
 - (3) Sarcoidosis