

PathMD™: Board Review Letter

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Hematopathology - Part 5

Volume 1, Number 46

Case #1 A patient presents with an elevated WBC count, and flow cytometry is performed. Based on the dot plots shown on the website images for this case, what is the best diagnosis?

- A. Mantle cell lymphoma
- B. Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma
- C. Peripheralized Marginal Zone Lymphoma
- D. T-cell ALL
- E. B-cell ALL

Case #2 A patient presents with an elevated WBC count, and flow cytometry is performed. Based on the dot plots shown the website images for this case, what is the best diagnosis?

- A. Mantle cell lymphoma
- B. Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma
- C. Peripheralized Marginal Zone Lymphoma
- D. T-cell ALL
- E. B-cell ALL

Case #3 A 40 year old woman presents with an elevated WBC count (25K) with abnormal immature cells noted by the hematology technologist (see case images). Flow cytometry demonstrated the cells to be positive for CD13 and CD33 and negative for CD34 and HLA-DR. What is the best diagnosis?

- A. B-ALL
- B. AML-M0
- C. AML-M2
- D. AML-M4
- E. APL

Case #4 A 36 year old Hispanic male with a CD4 count of 20 presents to the emergency department complaining of chronic headaches for several months. A routine CBC showed pancytopenia, and a bone marrow biopsy was performed. Based on the findings, what is the most likely diagnosis?

- A. Histoplasmosis
- B. Blastomycosis
- C. Coccidiomycosis
- D. Cryptococcus
- E. Mycobacterium avium

Case #5 A patient with a history of acute leukemia undergoes a bone marrow aspiration. Part of the specimen is sent for cytogenetic analysis. Results of the karyotype are shown in the image for this case. Based on the findings (which are highlighted by red arrows), what is the best diagnosis?

- A. AML-M2
- B. AML-M3
- C. AML-M4Eo
- D. AML M5a
- E. ALL

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Case #6 A 12 year old boy presents with a WBC of 233K. The bone marrow aspirate with a myeloperoxidase stain are shown. Flow cytometry demonstrated CD19 positivity. What is the best diagnosis?

- A. Pre B-ALL
- B. Pre T-ALL
- C. AML-M2 with t(8;21)
- D. APL
- E. AML-M4

Question #1 All of the following are true with respect to MALT/marginal zone lymphomas EXCEPT:

- A. Trisomy 3 in a majority of MALT cases
- B. t(11;18) is associated with lower response to H. pylori therapy
- C. Are typically indolent disease processes
- D. Not present in primary large B-cell gastric lymphoma
- E. None of the above

Question #2 Which of the following are associated with a worse prognosis in CLL/SLL:

- A. Trisomy 12
- B. Del 13q14
- C. CD38 expression on flow cytometry
- D. Both A and C are correct
- E. All of the above are correct

Question #3 Mantle Cell Lymphoma is associated with which of the following:

- A. t(11;14)
- B. t(8;14)
- C. t(2;5)
- D. t(11;18)
- E. t(14;18)

Question #4 Which of the following chromosomal abnormalities is commonly found in multiple myeloma:

- A. +3
- B. 13q14 or monosomy 13
- C. del 8
- D. del 14
- E. +5