

## Case scenario hem

1. A 22-year-old male presents with a 2-month history of a slowly enlarging, painless left supraclavicular lymph node. A biopsy is performed. Histopathology reveals a nodular architecture divided by dense collagen bands. Within the nodules are scattered large neoplastic cells with abundant clear cytoplasm, giving the appearance of lying within lacunae, amidst a background of lymphocytes, histiocytes, and eosinophils. Classic binucleated "owl-eye" cells are very rare. Which of the following statements is MOST accurate regarding this patient's condition?

- A) It represents the most common subtype of Hodgkin lymphoma and has a good prognosis.
- B) It is strongly associated with Epstein-Barr virus and carries the worst prognosis among classical HL subtypes.
- C) It is characterized by "popcorn" (lymphocytic and histiocytic) cells and typically lacks classic Reed-Sternberg cells.
- D) It most commonly presents with widespread peripheral lymphadenopathy and frequent extra-nodal involvement at diagnosis.

2. A 35-year-old woman with a history of rheumatoid arthritis presents with bilateral, mobile, non-tender axillary lymphadenopathy. An excisional biopsy shows marked enlargement of the cortex with numerous secondary lymphoid follicles of varying sizes. The germinal centers are prominent and contain tangible-body macrophages. The mantle zones are well-defined, and there is no capsular infiltration. Which of the following is the most likely diagnosis, and what is the primary immunologic process?

- A) Follicular Lymphoma; neoplastic proliferation of germinal center B-cells.
- B) Reactive Follicular Hyperplasia; antigen-driven proliferation of follicular B-lymphocytes.
- C) Nodular Lymphocyte-Predominant Hodgkin Lymphoma; proliferation of "popcorn" variant neoplastic cells.
- D) Chronic Lymphadenitis, non-specific; diffuse infiltration by plasma cells and histiocytes.



3. A 58-year-old man presents with fever, night sweats, and rapidly progressive generalized lymphadenopathy. A lymph node biopsy reveals a diffuse pattern with a pauci-cellular background, containing numerous large, bizarre binucleated cells with prominent eosinophilic nucleoli and frequent mitotic figures. Reactive lymphocytes are markedly decreased. Immunohistochemistry is positive for CD15 and CD30. Which subtype of Hodgkin Lymphoma does this most likely represent, and what is its associated prognosis?

A) Nodular Sclerosis Type; Relatively Good.

B) Mixed Cellularity Type; Poor.

C) Lymphocyte-Rich Type; Good.

D) Lymphocyte Depletion Type; Worst.

4. A 28-year-old immigrant presents with a several-month history of a slowly enlarging, painless mass in the right side of the neck. On examination, multiple right cervical lymph nodes are matted together into a firm, fixed mass. An ultrasound-guided core biopsy reveals extensive amorphous, granular, eosinophilic debris surrounded by a collar of lymphocytes, epithelioid cells, and Langhans giant cells. Which of the following is the most likely complication specific to this condition if it involves mesenteric lymph nodes?

A) Formation of a cold abscess that may open into the peritoneum, causing TB peritonitis.

B) Development of a bronchoesophageal fistula.

C) Secondary systemic amyloidosis.

D) Pathological calcification of the lymph nodes.

5. A 40-year-old HIV-positive patient presents with widespread lymphadenopathy. Biopsy of an inguinal node shows complete effacement of the normal architecture by a monomorphic population of atypical lymphocytes. There is no evidence of Reed-Sternberg cells or a polymorphous inflammatory background. Based on the



fundamental classification from the notes, how does the spread of this malignancy most likely differ from that of Hodgkin Lymphoma?

- A) It typically shows contiguous spread from one lymph node group to the next.
- B) It is more commonly localized to a single axial group of lymph nodes at presentation.
- C) It often demonstrates non-contiguous spread and is more common as a primary extra-nodal presentation.
- D) Peri-nodal extension is less frequent compared to Hodgkin Lymphoma.

6. A 19-year-old college student presents with acute onset of severe sore throat, fever, marked fatigue, and tender cervical lymphadenopathy. A Monospot test is positive. A lymph node biopsy would most likely reveal which of the following histological patterns?

- A) Sinus histiocytosis with distended sinuses filled with benign histiocytes.
- B) Paracortical hyperplasia with immunoblastic proliferation.
- C) Non-caseating "naked" granulomas with asteroid bodies.
- D) Stellate microabscesses surrounded by palisading histiocytes.

8. A 12-year-old child develops significant lymphadenopathy in the left axilla two weeks after being scratched by a new kitten. A biopsy of the node is performed. Which of the following microscopic findings is most characteristic of the suspected disease?

- A) Large, non-caseating granulomas with prominent Schaumann bodies.
- B) Microgranulomas composed of epithelioid cells without caseation.
- C) Suppurative necrosis with abundant neutrophils and bacterial colonies.
- D) Stellate-shaped areas of necrosis surrounded by palisading histiocytes (stellate granulomas).

10. A 65-year-old male is diagnosed with Stage III Hodgkin Lymphoma. According to the



staging system outlined in the notes, what does this stage indicate?

- A) Involvement of lymph node regions on both sides of the diaphragm.
- B) Involvement of more than one lymph node region on the same side of the diaphragm.
- C) Involvement of a single lymph node region.
- D) Diffuse or disseminated involvement of one or more extra-lymphatic organs.

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**\*\*Answer Key:\*\***

- 1. A
- 2. B
- 3. D
- 4. A
- 5. C
- 6. B
- 8. D
- 10. A

