

Case Report ALCL

Patrick Rock 8/30/2016

Differential Diagnosis

The differential diagnosis for ALCL includes the following: Hodgkin disease, B-cell lymphoma Diffuse large cell lymphoma, Malignant histiocytosis, Anaplastic Large-Cell Lymphoma (ALCL) Metastatic melanoma, Viral infection. Since ALCL can present simply as enlarged lymph nodes, any lymphoma can be on the differential.

Additional Workup

Additional workup includes excisional biopsy of lymphadenopathy looking for characteristic cells. Bone marrow biopsy, cytogenetics, and immunohistochemistry are performed searching for specific markers and bone marrow involvement. LDH and beta2-microglobulin are prognostic indicators associated with tumor activity and size.

Most Likely Diagnosis

The most likely diagnosis is Anaplastic Large-Cell Lymphoma (ALCL). This rare neoplasm is suggested by large anaplastic cells with horseshoe or embryoid nuclei. The diagnosis is confirmed by “the presence of rearrangements in the ALK gene on chromosome 2p23” - Robbins. ALK is not expressed in normal lymphocytes so its presence is a good indicator. If ALK is absent the prognosis is much worse. These tumors usually express CD30.

Course of Management

Since this presentation involves distant metastasis chemotherapy is required. CHOP *cyclophosphamide, doxorubicin, vincristine, and prednisone* is the most common therapy for ALCL. Surgery (hysterectomy) has already been performed to remove the mass. Prognosis is not good and recurrence expected within 2 years.

Salient Features

ALCL is a T-Cell neoplasm that is CD4+, CD8-, CD30+. It is associated with many infectious diseases including HSV, syphilis, leishmaniasis. There is a possible association between breast implants and ALCL.

References

- *ASCP CaseSet Hematology & Coagulation*
- *Robbins and Cotran Pathologic Basis of Disease*
- **Medscape ALCL**
- **FDA ALCL**