A 62-year-old man with a neck mass. FNA and biopsy shows:

Cytology
A 62-year-old man with a neck mass. FNA and biopsy shows:

Histology of the cell block (x400)

Histology of the subsequent biopsy (x100)
A 62-year-old man with a neck mass. FNA and biopsy shows:

Histology of the subsequent biopsy (x200)

Immunohistochemistry - **CD68** (x200)
A 62-year-old man with a neck mass. FNA and biopsy shows:

**Immunohistochemistry - S100 (x200)**

**Immunohistochemistry - CD21 (x200)**
A 62-year-old man with a neck mass. FNA and biopsy shows:

Additional IHC: subset lysozyme+, subset MPO+, Ki67+(~30%), vimentin+; negative for CD1a, CD23, CD35, EMA, HMB45, pankeratin, and PD1.

**FINAL DIAGNOSIS:**

Dendritic cell neoplasm, favoring interdigitating dendritic cell sarcoma.

**Discussion:**

This is an unusual case of histiocytic and dendritic cell neoplasms [1], which include 1) Histiocytic sarcoma, 2) Langerhans cell histiocytosis, 3) Langerhans cell sarcoma, 4) Indeterminate dendritic cell tumor, 5) interdigitating dendritic cell sarcoma, 6) Follicular dendritic cell sarcoma, 7) Fibroblastic reticular cell tumor, 8) Disseminated juvenile xanthogranuloma, and 9) Erdheim-Chester disease.

The current tumor cells infiltrate the lymph node in an interfollicular pattern with spindly cell morphology, but no polymorphism as seen in Histiocytic sarcoma. The weak and subset positivity for CD68 and lysozyme does not favor a Histiocytic sarcoma. The negativity for CD1a and only focal positivity for S100 also rule out Langerhans cell histiocytosis/sarcoma or Indeterminate dendritic cell tumor. Negativity for CD21 and CD35 rule out Follicular dendritic cell sarcoma. Cytokeratin...
A 62-year-old man with a neck mass. FNA and biopsy shows:

negativity does not favor Fibroblastic reticular cell tumor. The lack of Touton-type giant cells and the tumor location do not favor either Disseminated juvenile xanthogranuloma or Erdhaim-Chester disease. Therefore, the most favored diagnosis is Interdigitating dendritic cell sarcoma.

The patient has been managed by an oncologist with 6 courses of doxorubicin and dacarbazine and he is currently alive with recurrent disease.

Reference: