







- + CD45, BCL-6

SOURCE OF TISSUE:

1. MEDIASTINAL MASS (1FS)
2. CHEST WALL MASS (2FS)
3. CHEST WALL MASS FAT
4. CHEST WALL MASS
5. MEDIASTINAL MASS
6. MEDIASTINAL MASS, FLOW CYTOMETRY

GROSS:

Specimen "No. 1" labeled "Mediastinal Mass" consists of a 0.6x0.6x0.2-cm red, rubbery piece of tissue. All tissue is submitted for frozen section as "1FS".

Specimen "No. 2" labeled "Chest Wall Mass" consists of two pieces of red, rubbery tissue measuring 0.3 to 1 cm. All tissue is submitted for frozen section as "2FS". (Debra Martin, PA (ASCP), under the supervision of Dr. Josephine Harter)jmt

Specimen "No. 3" labeled "Chest Wall Mass Fat" consists of yellow glistening tissue measuring 0.8x0.4x0.3 cm. The tissue is totally submitted in cassette "3".

Specimen "No. 4" labeled "Chest Wall Mass" consists of two rubbery, tan to yellow glistening portions of tissue measuring 0.4x0.2x0.2 cm. The tissue is totally submitted in cassette "4".

Specimen "No. 5" labeled "Mediastinal Mass" consists of multiple, rubbery red to gray tissue fragments varying from 0.3 to 0.5 cm. The specimen measures 1.5x1x0.3 cm. The tissue is totally submitted in cassette "5". (Dictated by Debra Martin, PA (ASCP), under the supervision of Dr. Josephine Harter)jmt

Specimen "No. 6" labeled "Mediastinal Mass, Flow Cytometry" consists of small outer surface submitted for possible flow cytometry.

FROZEN SECTION DIAGNOSIS:

- 1FS) Diagnostic tissue present; favor germinoma
- 2FS) Fibrous tissue (Dr. Josephine Harter)jmt

MICROSCOPIC:

The biopsy specimen consists of several loose clusters of large lymphoid cells with vacuolated cytoplasm and pleomorphic nuclei. These cells are delineated by thin and thick fibrotic bands with numerous reactive small lymphocytes and histiocytes in the background. By immunolabeling, these large cells are positive for CD20, BCL-6 and CD45, but are negative for BCL-2, CD10 and OCT3/4. CD30 is also expressed in some of these tumor cells.

FINAL DIAGNOSIS:

- 1 & 5) Mediastinal Mass: Biopsies:
  - Fragments of lymphoid tissues with primary mediastinal diffuse large B-cell lymphoma (PMDLBCL, please see COMMENT)
- 2. Chest Wall Mass: Biopsy:
  - Blood and fibrous tissue
- 3. Chest Wall Mass Fat: Biopsy:

- Blood and fibrous tissue

4. Chest Wall Mass: Biopsy:

- Blood, granulation tissue and fat necrosis

COMMENT:

The fine sclerosis, nodular pattern of lymphoid infiltration, strong CD20 and BCL-6 expression support the diagnosis of PMDLBCL. Expression of CD30 is often seen in this type of lymphoid malignancies as defined by gene expression profiling studies.

\* This case was reviewed at our daily QA conference with agreement as to the above diagnosis..

\*Immunohistochemistry Stain: This test may have been developed and its performance characteristics determined by the Clinical Laboratory -IHC University of Wisconsin Hospital and Clinics, Madison WI. It has not been cleared or approved by the U.S. Food and Drug Administration.