



## Hemepath Case 43: 25-Year-Old Female

### HISTORY

A 25-year-old female receives a chest x-ray after being in an automobile accident. Imaging reveals no organ damage or bone fractures from the collision; however, enlargement of the mediastinum is noted. Subsequent CT of the chest shows a well-circumscribed mediastinal mass with no evidence of infiltration.

The patient is in good health and reports no symptoms. She has an unremarkable past medical history.

### CBC

Hgb (g/L)	N
MCV	N
WBC	N
Plt	N

### DESCRIPTION OF SLIDE

#### Lymph Node Biopsy

The lymph node exhibits a follicular pattern with expansion of the interfollicular space. Follicles show a concentric arrangement of the mantle zone (see arrows), also known as "onion skinning". Germinal centers are hyalinized (see circles), and some follicles contain multiple germinal centers. As well, several follicles show "lollipop" proliferation by blood vessels (see rectangle). Many high endothelial venules are seen in the interfollicular space.

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### MORPHOLOGICAL DIAGNOSIS

Castleman disease

### DISCUSSION

This is an example of a unicentric presentation of Castleman disease, hyaline vascular variant.

Castleman disease, also known as angiofollicular lymph node hyperplasia or giant lymph node hyperplasia, is an uncommon, benign lymphoproliferative disorder, classically presenting as asymptomatic mediastinal lymphadenopathy. Although the cause of proliferation is unknown, some have suggested an autoimmune mechanism, while others have shown an association with HIV virus and human herpes virus-8 (HHV-8).

Histologically, Castleman disease can be divided into the hyaline vascular type or the plasma cell type. In the hyaline vascular variant, lymph node follicles are small, with germinal centers surrounded by concentric layers of mature lymphocytes and hyaline. In the plasma cell subtype, the larger follicles are separated by sheets of plasma cells, some of which exhibit atypical morphology. The hyaline vascular type is more common in patients with unicentric Castleman disease, while the plasma variant is frequently found in multicentric patients.