



San Diego Society of Hematopathology

Case of the Quarter

Q1 2016: - Answer

Diagnostic Clues

- "Kissing cells" are sometimes present throughout all tumor.
- Large eosinophilic cytoplasm with "syncytial" appearance of the plump ovoidal pleomorphic cells.
- Fascicular pattern of growth by neoplastic spindle cells is quite focal and scan (it need to handling all available tissue into several blocks !)
- Expression of follicular-dendritic-cell markers.

Final Diagnosis:

Extranodal Follicular Dendritic-Cell Sarcoma (a very rare example of a pleomorphous subtype)

This case is peculiar by the following findings:

- Omentum as a primary anatomical site of the tumor.
- High-grade histologic features: diffuse pattern growth, very atypical large plump ovoid cells with bizarre pleomorphic nuclei and large eosinophilic syncytial cytoplasm; many atypical mitoses.
- The aberrant expression of large spectrum cytokeratin AE1/AE3 by several clusters of tumor cells is quite rare.
- Fascicular pattern of growth by neoplastic spindle cells is quite focal and scan.

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Follicular Dendritic Cell Sarcoma DIFFERENTIAL DIAGNOSIS

- spindle cell carcinoma / undifferentiated carcinoma
- thymic carcinoma / thymoma
- meningioma
- undifferentiated pleomorphic sarcoma
- melanoma
- GIST (gastrointestinal stromal tumor)
- histiocytic sarcoma
- langerhans-cell sarcoma
- interdigitating dendritic-cell sarcoma
- inflammatory myofibroblastic tumor
- Inflammatory pseudotumor

(“Inflammatory Pseudotumor-like” Follicular Dendritic Cell Sarcoma:
a distinctive clinicopathologic variant EBV+ of Follicular Dendritic Cell Sarcoma which typically involves the liver and/or spleen which may mimics Inflammatory pseudotumor)

- [An Unusual case of follicular dendritic cell sarcoma of the omentum with pleomorphous morphology and aberrant cytokeratin expression.](#) Stefano Fratoni, Luca Cupelli Andrea Tendas Laura Scaramucci Luciana Morino Teresa Dentamaro Paolo de Fabritiis Giuseppe Santeusanio. IN PRESS - J Hematopathol (2014) 7: 177-170
- [Follicular dendritic cell sarcoma of the omentum: multidetector computed tomography findings.](#) Chien JC, Lao WT, Chen CL, Chan WP. Korean J Radiol. 2013 Mar-Apr;14(2):213-7
- [Recurrent follicular dendritic cell sarcoma in abdomen: report of a case.](#) Liu J, Zhang R, Zhu ZL, Cao P, Li X, Zhou P, Zhang W. Zhonghua Bing Li Xue Za Zhi. 2010 Oct;39(10):709-10.
- [Clinicopathologic study of intraabdominal extranodal follicular dendritic cell sarcoma.](#) Tu XY, Sheng WQ, Lu HF, Wang J. Zhonghua Bing Li Xue Za Zhi. 2007 Oct;36(10):660-5.
- [Follicular dendritic cell sarcoma of the omentum.](#) Yamakawa M, Andoh A, Masuda A, Miyauchi S, Kasajima T, Ohmori A, Oguma T, Takasaki K. Virchows Arch. 2002 Jun;440(6):660-3.