TJC Turkish Journal of Cancer
Volume 38, No. 4, 2008

Images in hematology-oncology

EYLEM AKAR, AYŞEGÜL ÜNER

Hacettepe University Institute of Oncology, Ankara-Turkey

CLINICAL HISTORY

Lymph node biopsy of an 84-years old female was sent for consultation to our institute.

PATHOLOGY

The microscopic examination of specimen showed effacement of the lymph node architecture. Neoplasia had a predominantly follicular pattern. Neoplastic follicles were poorly defined and lacked mantle zones. Tissue was infiltrated with large transformed cells with round or oval, indented nuclei, vesicular chromatin, one-three nucleoli and narrow rim of cytoplasm. These blastic cells were in sheets in some follicles. Occasional follicle contained small to medium sized cells with angulated, elongated nuclei, inconspicuous nucleoli and scant cytoplasm.

Immunohistochemical studies revealed that neoplastic cells were positive for CD20, bcl-6 and bcl-2. They were negative for CD3. Ki67 staining showed a high proliferation fraction.

What is your diagnosis?

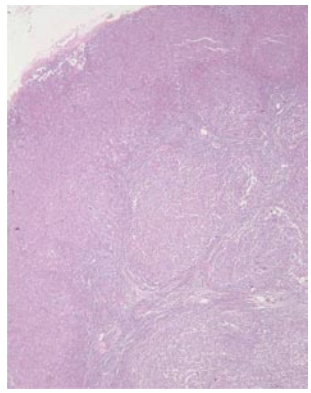
PATHOLOGIC DIAGNOSIS

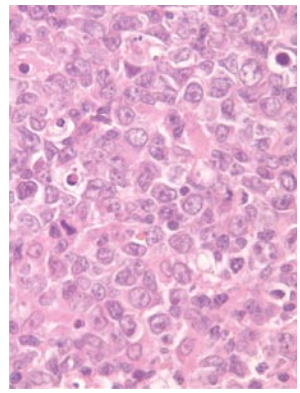
Follicular lymphoma, grade 3b, predominantly follicular.

DISCUSSION

Follicular lymphomas are one of the most frequently encountered lymphomas. In the new WHO Classification of Hematopoetic and Lymphoid Tumors, published in 2008, some modifications in the diagnosis of follicular lymphomas have been introduced.

One of these changes is in the grading of follicular lymphomas which has been traditionally problematic. The grading scheme was based on the number of blasts per high power field in the 2001 WHO Classification. It was realized that counting the number of blasts is subjective and irreproducible. Therefore, in the new classification separating the follicular lymphomas into two broad categories in terms of grade, namely ‘low grade’ and ‘high grade’ is proposed. Grades 1 and 2 in the 2001 classification are lumped together under the low grade category and grade 3 is referred to as high grade.





Another change is, if a diffuse large B cell component is present in the sections it should be reported as the primary diagnosis, with an estimated proportion of the diffuse large B cell lymphoma and follicular lymphoma given.

In the new WHO classification, pediatric, primary intestinal and other extranodal follicular lymphomas are recognized as variants of the follicular lymphoma while primary cutaneous follicle center lymphomas are classified as a separate entity by itself.

The case presented here did not have any diffuse areas although all of follicles contained predominantly centroblasts/immunoblasts without any intervening centrocytes. This is relatively rare and may be a reflection of sampling of the lymph nodes.

References

1. Swerlow HS, Campo E, et al., editors. WHO Classification of Tumours: Tumours of Haematopoietic and Lymphoid Tissues. Lyon:IARC Press, 2008.
2. Jaffe ES, Harris NL, et al., editors. WHO Classification of Tumours: Tumours of Haematopoietic and Lymphoid Tissues. Lyon:IARC Press, 2001.