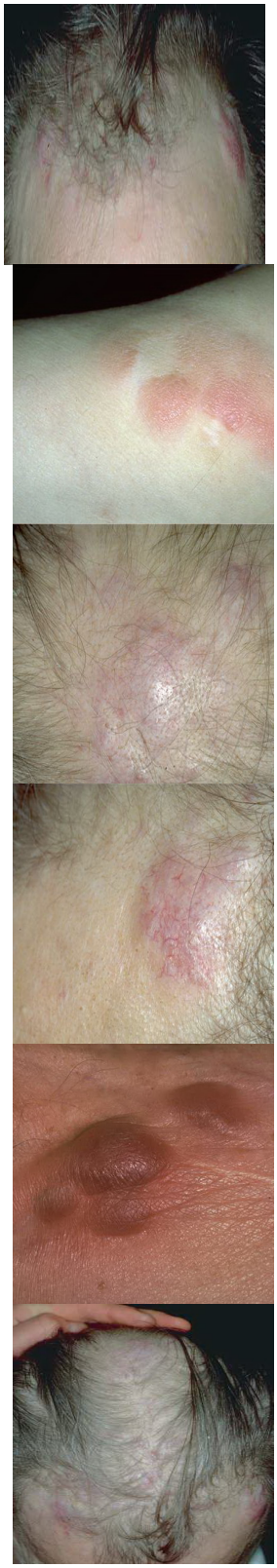

centroblastic and centroblastic/centrocytic

A minority of centroblastic and centroblastic/centrocytic cell lymphomas are accompanied by a prominent epithelioid cell response and were suggested to be a distinct variant of B-cell lymphoma of germinal center cell origin. To confirm the clinicopathologic significance of these mainly large B-cell lymphomas with an epithelioid cell response (LBCL-ER), we reviewed 50 patients with LBCL-ER and compared the results with those of 167 other diffuse large B-cell lymphomas (DLBCL) and 94 follicular lymphomas (FL) without epithelioid response. The patients with LBCL-ER showed a higher age distribution (median 71, P =.03), a female predominance (M:F = 18:32, P =.001) and less frequent involvement of extranodal sites >1 (P =.004) compared with those with DLBCL, and presented with a bulky mass of the affected lymph nodes in 54% of cases. They were also older (P =.0006) and more associated with the aggressive clinical factors such as serum LDH level and International Prognostic Index score than those with FL. Histologically, nine cases (18%) partially showed a follicular growth pattern, and the others (82%) were occupied by a diffuse growth pattern. The epithelioid cells were accumulated in large demarcated masses, partially imparting a lymphoepithelioid (Lennert) lymphoma-like appearance to some portions of the lesions in every case. Immunohistochemically, LBCR-ER was positive for CD20 in every case, CD10 in 43% of the cases, and BCL-2 in 56%. None of the tumor cells in the 40 cases tested expressed CD5 antigen. Immunostaining also often highlighted the remnants of the follicular dendritic cell network. The BCL-2 gene rearrangement was detected in only 19% of the cases examined. The survival curve of the cases of LBCL-ER was almost identical with that of DLBCL and was significantly inferior to that of FL. The centroblastic and centroblastic/centrocytic lymphoma with an epithelioid cell response may be regarded as the morphologic variant of DLBCL preferentially arising in the aged population and reflecting the disease progression of FL.

To clarify the clinicopathologic features of B-cell lymphoma associated with prominent epithelioid granulomatous responses other than immunocytomas, 12 patients were studied. There were six men and six women. The lymphoma generally affected elderly patients (median age, 58.5 years) and was mostly nodal in origin. Seven of the 12 patients had a localized lesion (stage I or II), and five had an advanced lesion (stage III or IV). Histologically, four patients showed a follicular growth pattern and eight a diffuse growth pattern. Based on the updated Kiel classification, nine patients showed centroblastic lymphomas, and three showed centroblastic-centrocytic lymphomas. The epithelioid cells were accumulated in large, poorly demarcated masses. Trabecular fibrosis compartmentalized in the lymph nodes, producing a vague nodular pattern in low-power fields. Immunohistochemical studies of the tumor cells revealed positive membrane staining with L26 in all 12 patients and with LN-1 antibody in 9 of 10 patients. Expression of the bcl-2 protein was present in all seven patients tested. Genotypic investigation exhibited germline configuration of the immunoglobulin heavy chain gene, the T-cell receptor β-chain gene and the *bcl*-2 gene in all three patients investigated. By in situ hybridization, Epstein-Barr virus genomes were detected in only a few tumor cells in three of the patients tested. This study indicated that most, if not all, of the B-cell lymphomas with prominent epithelioid granulomatous responses other than immunocytoma were of follicular center cell origin.