

Title

CD5 expression in diffuse large B-cell lymphoma

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Introduction

CD5 is a member of the scavenger receptor cysteine-rich (SRCR) superfamily, and is expressed by most T cells and a subset of B cells (B1 cells). CD5+ cases of DLBCL are rare and are described as a distinct histological entity with poorer outcomes. The theory of an independent prognostic value of CD5 in DLBCL patients is widely accepted. Some studies have proposed a first-line, more aggressive therapy for these patients. In this study, we aim to identify the clinical, epidemiological, and prognostic features of our CD5+ DLBCL patients.

Methodology

This is a retrospective, descriptive, and analytical study, from January 2018 to December 2021, and includes newly diagnosed patients with DLBCL during this period, and expressing CD5 marker.

Results

We report 6 cases of CD5+ DLBCL among a total of 184 DLBCL patients (3.26%), consisting of 3 women and 3 men. The median age at diagnosis was 60.5 years [44-71 years], and the average diagnostic delay was 6.3 months. Three patients had B signs at diagnosis, and five had a tumoral syndrome (adenopathy and/or splenomegaly). Performans status was ≤ 1 in 5 patients. Histological examination showed a proliferation index greater than 80% in 4 patients, CD45 positivity in one patient, and BCL2 and BCL6 positivity in two and three patients respectively. Extension workup showed extensive involvement (stage III/IV) in 5 patients. A bulky mass was described in four of the six patients. The IPI score was greater than three in 4 patients, and only one patient developed venous thrombosis.

Complete blood count revealed anemia in 5 patients, lymphopenia in 2 patients, and thrombocytopenia in one patient. ESR was elevated in 4 patients, and we observed high levels of LDH in 5 patients.

Five patients were placed on the RCHOP protocol, three patients achieved complete remission after first-line treatment, while two were reported to be refractory. One patient died from severe disease before the start of treatment; he had been diagnosed with a voluminous gastric mass measuring 15 cm.

We found a significant correlation between CD5 expression and adrenal involvement ($p=0.033$) and anemia ($p=0.01$).

Conclusion

Our study, despite the small number of patients, confirms the rarity of this entity and its poor outcome. Larger studies are needed to properly characterize these patients so that appropriate action can be taken as soon as they are diagnosed. Some studies propose dose-adjusted R-EPOCH and autologous stem cell transplantation, but evidence of their effectiveness is still lacking. in these situations.