Primary Bone Lymphomas: analysis of 42 cases of a single institution in 15 years (1999-2014)

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Abstract

Background: Primary Bone Lymphoma (PBL) is a rare condition. As such, it is very difficult to define parameters for management and factors associated with prognosis.

Questions/purposes: The authors present their experience from a single institution with the diagnosis and management of 42 patients with PBL over a 15-year period (1999-2014), trying to define which variables influenced patient prognosis.

Methods: Fifty-five patients with PBL were retrospective evaluated. Forty-two out of these 55 charts were considered valid for the follow up analysis (76.3%).

Results: Most patients were male (61.9%); median age at diagnosis was 51.5 years; median follow up was 102.7 months (range 4 months - 9.5 years). One had human immunodeficiency virus (2,4%). Pain at the affected site was the most prevalent symptom. Average time since the onset of symptoms until diagnosis was 5.4 months. Most affected sites were vertebrae n=16 (33.3%) and femur n=12 (23.8%). According to the International Prognosis Index score (IPI), 64.3% of the patients were 0-1 (low grade) and 25.7% were low-intermediate. The most common histology was diffuse large B cell lymphoma (DLBCL) (85,7%). Immunophenotyping was performed for all cases, and 95,3% of the cases were CD20 positive. Eleven patients (26.2%) had pathologic fracture at diagnosis. From these, 72.7% had undergone surgery, being spine arthrodesis the most performed one. All patients received chemotherapy, and 30% of the regimens contained Rituximab. Thirty-eight per cent of the patients received radiation therapy. Overall survival was 50%, and survival median time was 80 months (CI 95%: 3.4 - 156.6 months). Age and the choice of regimen of chemotherapy influenced survival of the patients. Younger patients and the ones who received RCHOP had better prognosis.

Conclusions: Choice of chemotherapy regimen and age influenced PBL patients’ survival.

KEY Words: bone lymphoma, diffuse large B-cell lymphoma