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Anthracycline-based chemotherapy of primary non-Hodgkin's lymphoma of the testis: the hellenic cooperative oncology group experience.

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Source

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Abstract

Testicular non-Hodgkin's lymphoma is an uncommon disease and its outcome following chemotherapy and/or radiotherapy has been variable. A retrospective analysis was performed on 26 patients with primary testicular lymphoma treated predominantly with anthracycline-based chemotherapy between 1984 and 1999. The patients' median age was 60 years (range 19-82 years) with 17 (65.4%) patients being older than 60 years. Four (15.4%) patients had constitutional B symptoms. There were 11 (42.3%) patients with high grade lymphoma, 12 (46.2%) with intermediate grade, 1 (3.8%) with low grade and 2 (7.7%) were not classified. According to the Ann-Anbor staging system, 18 patients (69.2%) had early (stage I/II) and 8 (30.8%) advanced (stage III/IV) disease. Chemotherapy was administered to 24 patients including 22 patients who received anthracycline-based chemotherapy. Two stage IEA patients were treated with orchidectomy and adjuvant radiotherapy to the regional lymph nodes without systemic chemotherapy. Chemotherapy alone resulted in a complete remission (CR) in 14 (58.3%) of 24 patients and partial remission in 1 (4.2%), amounting to an overall response rate (RR) of 62.5%. Of the 5 stage I patients who had chemotherapy on an adjuvant basis, 4 (80%) had CR/no evidence of disease. Of the 11 stage II patients, 8 (72.7%) achieved CR and 1 (9.1%) PR (overall RR of 81.8%). CR was obtained in 2 (25%) of 8 stage III/IV patients. Both patients remain disease free for 26 and 65 months. Excluding the 5 stage I patients, chemotherapy resulted in a CR in 10/19 (52.6%) patients and a PR in 1/19 (5.2%), inducing an overall RR of 57.8%. The mean duration of response was 75 months (range 8-145.5+ months). After a median follow-up of 87 months (range 0.13-145.5+ months) the median survival time was 31 months (range 0.13-145.5+ months) and the median time to progression (TTP) 17 months (range 0.13-145.5+ months). The median TTP was significantly higher in early disease compared to that of advanced disease (52 vs. 3 months, $p = 0.02$). Of the 3 patients who relapsed following disease-free status, CNS involvement occurred in 2 stage II patients and contralateral testis involvement in 1 stage IEA, respectively. The latter remained disease free for 2 years following orchidectomy alone. The other 2 patients who relapsed did not respond to salvage chemotherapy and died. There was no significant relationship between the values of LDH and beta(2)-microglobulin with the outcome except for ESR which was significantly related with the CR ($p = 0.005$) or RR ($p = 0.005$). In conclusion, patients with primary testicular lymphoma have a poor outcome, despite the treatment with anthracycline-containing regimens. Treatment with anthracycline-based chemotherapy is recommended in patients at early stages. In advanced disease, more intensive or investigational regimens should be considered. Because the relapse rate in the CNS and contralateral testis is quite high in most studies, prophylactic CNS treatment and radiotherapy to the other testis should be included in the management of testicular lymphoma.