627. Aggressive Lymphomas: Clinical and Epidemiological: Poster III

Symposia: Aggressive Lymphomas: Clinical and Epidemiological Program: Oral and Poster Abstracts

Type: Poster

Monday, December 11, 2023: 6:00 PM-8:00 PM

Halls G-H (San Diego Convention Center)

4482 The Outcome of Diffuse Large B-Cell Lymphoma Patients with Testicular Involvement - Real World Data

Program: Oral and Poster Abstracts

Session: 627. Aggressive Lymphomas: Clinical and Epidemiological: Poster III

Hematology Disease Topics & Pathways:

Clinical Practice (Health Services and Quality)

Monday, December 11, 2023, 6:00 PM-8:00 PM

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Introduction: Patients (pts) with testicular lymphoma (TL) have an increased risk of central nervous system (CNS) relapse. In rituximab era, the reported incidence vary from 10% (in limited disease) to 25% (advanced disease). More data is needed to guide the managment of TL pts in current era. Optimal strategy for CNS relapse prevention is uncertain.

Methods: We studied consecutive pts diagnosed between 2000 and 2022 with testicular diffuse large B-cell lymphoma (DLBCL) prospectively observed in the Czech Lymphoma Study Group Project NiHiL (Clinical Trial gov. NCT03199066). Objectives were to analyze the cumulative incidence of CNS relapse, time to CNS relapse, PFS and OS. The impact of various treatment strategies on CNS relapse was analyzed.

Results: We identified 229 pts with testicular involvement: 157 pts with primary testicular lymphoma (PTL) in clinical stage I or II and 72 pts in advanced stage (AD) III or IV. Median age was 70 years (range 33 - 87). Rituximab-based chemotherapy received 192 (83.8%) pts including 127 (81%) cases with PTL. Following localized treatments were used more often in PTL compared to AD: unilateral orchiectomy [148 (94.3%) vs. 47 (65.3%); $p < 0.0001$], testicular irradiation (RT) [116 (61.7%) vs. 40 (38.7%); $p = 0.005$]. Most patients (85%) received some form of CNS prophylaxis. There were similar rates in use of prophylactic methotrexate (MTX) between PTL and AD ($p = 0.88$): intrathecal (i.t.) MTX 64 (40.8%) vs. 29 (40.3%), intravenous (i.v.) MTX with or without cytarabine 20 (12.8%) vs. 7 (9.7%); combined i.t. and i.v. MTX 38 (24.2%) vs. 20 (27.8%). Out of 229 cases 25 (15.9%) PTL and 11 (15.3%) AD pts did not receive any CNS prophylaxis. Median follow-up was 51.8 months. Overall 63 (27.5%) pts relapsed including 14 (6.1%) relapses in CNS. Median time to CNS relapse was 21.9 months and to other systemic relapse was 14.7 months ($p = 0.63$). The 5-year cumulative incidence of CNS relapse in PTL was 4.55% (95% confidence interval [CI], 0.1 – 28.6) and in AD 12.07% (95% CI 0.8 – 39.6), respectively. In univariate analyses, MTX prophylaxis (i.v. and/or i.t.) and testicular RT had no impact on CNS relapse ($p = 0.49$ and $p = 0.60$, respectively). Orchiectomy was the single significant factor associated with lower risk of CNS relapse in PTL (hazard ratio [HR] = 0.11[95% CI 0 – 0.124]; $p = 0.001$). Rituximab significantly reduced CNS relapse in AD with testicular involvement (HR = 0.1002 [95% CI 0.0 – 0.45]; $p = 0.0005$). Out of 14 pts with CNS relapse 8 died due to lymphoma progression. Median progression-free survival (PFS) and overall survival (OS) in PTL was significantly better when compared to AD (PFS 92.9 vs. 28.1 months, $p < 0.0006$; OS 108.7 vs. 56.7 months, $p = 0.0002$). Median PFS2 and OS2 since CNS relapse was dismal in AD compared to PTL (PFS2 1.6 vs. 37.8 months, $p = 0.04$ and OS2 2.3 vs. 37.8 months, $p = 0.05$).

Conclusions: The rate of CNS relapses in PTL and advanced disease with testicular involvement is lower than previously reported. This study confirmed a significant favorable impact of rituximab in prevention of CNS relapse. Notably, methotrexate prophylaxis i.v. or i.t. did not alter the CNS relapse risk. Prognosis of CNS relapse is particularly poor in advanced disease.

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