LIMITED USEFULNESS OF CA125 MEASUREMENT IN THE MANAGEMENT OF PATIENTS WITH HODGKIN'S OR NON-HODGKIN'S LYMPHOMA

C. BONNET, Y. BEGUIN, M.-F. FASSOTTE, G. FILLET
Dept. of Hematology, University of Liège, CHU Sart Tilman, Liège, Belgium

Background: Several papers have reported the association of high CA125 serum levels with non-Hodgkin's lymphoma (NHL) and the relationship between high CA125 values and poor outcome.

Patients and Methods: In this retrospective study, 99 patients with NHL or Hodgkin's disease (HD) underwent serum CA125 assessment at diagnosis. Gender, age, presence of B symptoms, performance status (PS), histology, sites of tumor involvement, presence of effusion, clinical stage, age-adjusted International Prognostic Index, CRP, Hb, LDH and b2-microglobulin were evaluated for their association with serum CA125 levels. The impact of CA125 levels and others features on overall (OS) and progression-free (PFS) survival was also assessed. Features independently associated with high CA125 levels and poor OS or PFS were identified in multivariate Cox models.

Results: CA125 serum level was higher than the upper normal limit (35 U/L) in 34% of the patients. Univariate analyses showed that CA125 levels correlated with the presence of B symptoms, poor PS, aggressive histology, abdominal, bone marrow or mediastinal involvement, presence of effusions, advanced clinical stage, low Hb levels, high CRP, LDH or b2-microglobulin levels, and high aa IPI. In multivariate analysis, high b2-microglobulin, poor PS, high LDH level, the presence of effusions, abdominal involvement, advanced stage and aggressive histology were all associated with high CA125 serum levels. In univariate analyses, OS and PFS were affected by B symptoms, high aaIPI, advanced clinical stage, high b2-microglobulin, high CRP, and bone marrow involvement. OS was also significantly worse in patients with poor PS, low Hb, abdominal or mediastinal involvement, and high LDH level. OS and PFS were not different in patients with normal or elevated CA125 levels. Cox analyses showed significantly inferior OS and PFS in patients with high b2-microglobulin levels or poor PS. OS was also worse in patients with bone marrow involvement and aggressive NHL, while PFS was inferior in patients with NHL (as opposed to HD). Neither overall nor in any histological subgroup did CA125 influence OS or PFS significantly.

Conclusion: While CA125 serum level correlates with a number of features associated with more aggressive disease, it does not enhance the performance of standard prognostic markers in the treatment of patients with NHL or HD.