PP-161

Ewing sarcoma: an observational study of 65 patients. Treatment, follow up and clinical prognostic factors

C. Sanchez Perez, E. Carbo, M. Benito Gallo, J.A. Calvo Haro, M. Cuervo, J. Vaquero
Hospital General Universitario Gregorio Maranon, Madrid, Spain

Introduction: Ewing's Sarcoma is a primary bone cancer which affects mainly children and young adults. Because of its unspecific clinical development it has been difficult to identify those clues that would drive us into a correct diagnosis, treatment and follow up. The purpose of this study is to assess the outcome of patients with Ewing Sarcoma (EWS), to analyse their treatment and to identify prognostic factors.
Methods: We reviewed 65 patients diagnosed with EWS at our institution between 1991 and 2013. We described our population differentiating: sex, age, tumoral size, location and possible metastasis, LDH rates at diagnosis, chemotherapy regimen, surgical and radiotherapic treatment, clinical development. The prognostic significance and relative risk for various characteristics were assessed by a proportional hazards regression model. We estimated the overall survival (OS) and progression-free survival (PFS) by the Kaplan-Meier method and compared risk across groups using the log-rank test.
Results: Population characteristics were: median age 19,24 years (0,3-76), male 41p (63.1%). Median tumor size 8 cm (2-30). Commonly affected primary sites: extremity (41.5%), pelvis (23.1%), chest wall (9.2%) . 42 (65.6%) had localized disease, and 22 (34.4%) had metastatic disease.
Treatment Approach: 45 p (76.3%) underwent surgical resection, 48p (75%) external beam radiotherapy (EBRT). Chemotherapy regimens were 15p (33%) VAIA/EVAIA , 15p (33%) VAC/IE, 10p (16%) VIAE. After a mean follow-up of 40.7 months (P25-75; 13.3-86.16) , the 5-year actuarial OS and PFS were 67.4% and 49.2%. Median of OS and PFS were 156.54 months (121-192 IC95%) and 49.8 months (20-168 IC95%). Recurrence or progression was documented in 36p (55.4%). The mean time to failure was 19.5 months (3-181). In the univariate analysis, the OS was significantly affected by stage (Pr chi2 0.0141) and chemotherapy treatment (P= 0.036). Factors not correlated with outcome were: sex, age , LDH increase, primary tumor location, tumor size and surgical or radiotherapy treatment. In the multivariate model, only stage remained significant (P< 0.010)l.
Conclusions: Although we didn't find statistically significant results, we know that outcome of EWS is influenced by many clinical and treatment variables. Future EWS trials should include all the variables that have known prognostic significance.