Clinical Characteristics and Outcomes of Extremity Soft Tissue Sarcoma in Siriraj Hospital

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Background: Due to the heterogeneity of soft tissue sarcoma, there are conflicting data on the outcomes of the treatment. Moreover, several factors such as histologic subtype, treatment compliance and tolerability may influence the individual outcome of adjuvant treatment.

Objective: This study evaluated the clinical characteristic, prognostic factors, survival outcome and outcome of treatment in extremity sarcoma patients who were undergone complete extremity resection for soft tissue sarcoma in Siriraj hospital.

Method: Medical records of patients who were diagnosed with extremity soft tissue sarcoma and undergone extremity resection procedure in Siriraj hospital from January 2007 to November 2016 were reviewed. Data including clinical characteristic (e.g. age, gender), operation procedure, pathological results, and treatment were collected and evaluated. For those who received chemotherapy, regimen, numbers of cycles and toxicities were recorded. Outcomes of disease free survival (DFS) and overall survival (OS) were calculated using survival analysis, Kaplan-Meier method.

Results: A total of 58 patients with extremity sarcoma were included in this study. Of those, the median age was 53.5 years and 43.1% were male. There were 13 patients received adjuvant chemotherapy. A significant difference for worse DFS was tumor grade 3 with a size larger than 10 cm. (p <0.001). Median DFS was 56.2 months in chemotherapy group and 20.5 months in the non-chemotherapy group (p = 0.29). Recurrence of disease occurred in 43% of the patients. Median OS was 77.2 months in chemotherapy group and 66.6 months in the non-chemotherapy group (p = 0.24). No benefit of adjuvant chemotherapy was observed in any subgroup. Twenty percent developed grade 3-4 hematologic toxicity and 15.4% developed febrile neutropenia in patients received chemotherapy. Two patients experienced non-hematologic toxicities from chemotherapy leading to dose reduction or treatment discontinuation.

Conclusions: The results showed that high-grade tumor larger than 10 cm was a significant prognostic factor of DFS. There was inconclusive benefit of adjuvant chemotherapy related to DFS and OS in the patients with resected extremities soft tissue sarcoma.