

Survival Analysis On Adult Extremity Soft Tissue Sarcoma: A Single Institution Study Of 10 Years Duration

¹Wan Md Yusof WY, ¹Wan Faisham WI, ¹Nor Azman MZ
¹Orthopaedic Department, Hospital Universiti Sains Malaysia, Kubang Kerian, Kelantan

INTRODUCTION:

Soft tissue sarcoma is rare with incidence of less than 1% but remains as the commonest orthopaedic related malignancy. Local studies are still less in providing information. Therefore this study was performed with intention to evaluate its survival pattern.

MATERIALS & METHODS:

128 patients' data that fulfilled criteria in 10 years duration (1st January 2001- 31st January 2010) were obtained. Demographic studies and prognostic clinical characteristics were assessed for overall survival by using Kaplan Meier method and Cox proportional hazard regression.

RESULTS:

The overall median survival time was 10 years with 5- year overall survival of 58%. Disease specific survival rate was 18% at 5 years with its median survival time 12 months. No demographic results were statistically significant in affecting the overall survival (age, sex, sites of tumor, and subtypes, p-value >0.05). Limb salvage or amputation surgery, pre- and post- operative chemotherapy and radiotherapy, and progression of second malignancy were all not statistically significant (p- value >0.05). Pulmonary and distant metastasis, and local recurrence were the prognostic factors that significantly affect the overall survival (p <0.001). After a multivariate analysis, only pulmonary (CI:3.08, p <0.001) and distant (CI:2.30, p <0.004) metastasis were significant adversely associated with survival.

Variable	Regression coefficient (b)	Adjusted Hazards ratio (95% CI)	Wald stat	p-value
Lung metastasis				
No	0	1		
Yes	1.03	2.79(1.68,4.65)	15.53	<0.001
Distance metastasis				
No	0	1		
Yes	0.61	1.84(1.03,3.30)	4.18	0.041

Figure 1: Multiple linear of cox proportional hazard regression

DISCUSSIONS:

The median and overall survival was comparable and corresponded with other studies. Pulmonary and distant metastasis affected survival but fared better than other studies compared.

CONCLUSION:

Adult extremity soft tissue sarcoma in our center had comparable overall and median survival with other studies. The disease specific survival rate was low reflecting poor prognosis and high chance of mortality. Presence of pulmonary and/ or distant metastasis significantly influences patients' survival.

REFERENCES:

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