

Functional Outcome in Patients with Soft Tissue Sarcoma in Penang General Hospital

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INTRODUCTION:

Soft tissue sarcomas remain a challenge in obtaining the best post-surgical functional outcome.

MATERIAL AND METHODS:

The functional outcomes of alive patients with soft tissue sarcomas 2 years post surgery were assessed using Musculoskeletal Tumour Society score (MSTS score).

RESULTS:

Twenty patients (90.9%) had limb salvage surgery, 14 (63.6%) had good outcome scores while 2 patients (9.1%) who underwent amputation showed unsatisfactory outcome. These results were statistically significant ($p < 0.05$). Mean MSTS functional score was 23.63 (78.78%) with a range from 7-30 (23.3%-100%). There were average outcomes in 5 cases (22.7%) and 3 cases (13.6%) with unsatisfactory MSTS functional outcome. All patients with tumour size less than 5cm showed a good outcome compared to those larger than 5cm.

Table 1: Comparison of MSTS outcome

Parameters	Total (n=22)	MSTS outcome			p-value
		Uns	Avg	Good	
Types of surgery				0.013*	
Amputation	2 (9.1%)	2	0	0	
Limb salvage	20 (90.9%)	1	5	14	

Abbreviation - MSTS: Musculoskeletal Tumour Society score,

Uns: Unsatisfactory, Avg: Average

Notes:* statistically significant (p value < 0.05)

DISCUSSION:

Main surgical goal is to get a clear margin while conserving enough soft tissue for residual good function. Limb salvage poses increased risk of local recurrence compared to amputation, which achieves a wider margin but poorer functional outcomes was observed. Tumour size affects MSTS score, small tumour may be attributed to less extensive resection in achieving adequate margin without compromising normal tissue that is crucial for normal function.

CONCLUSION:

Patients with limb salvage surgery had better MSTS outcome versus amputation. Further larger and long-term studies are needed to validate these results.

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