

**FC-105****Myxofibrosarcoma: a particularly difficult-to-treat soft tissue sarcoma – Considerations from a series of 85 patients**

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Introduction: Myxofibrosarcomas constitute a difficult-to-treat subset of soft tissue sarcomas due to a high rate of recurrence. Few wide series were reported. An evaluation of a series of 85 patients was performed with the aim of improving treatment efficacy for this pathology.

Methods: 85 patients affected by myxofibrosarcomas of the limbs or superficial trunk were treated from 2004 to 2013, including patients presenting for first surgery or reexcision. Age ranged from 21 to 88 years (average 66). Dimension of the tumor was > 10 cm in 26 patients, between 10 and 5 cm in 31, < 5 cm in 28. Tumor was low-grade in 26 patients, high grade in 59, affecting the lower limb in 56 cases, the upper limb in 25 and superficial trunk in 4. Only two patients had metastatic disease at presentation.

Radiotherapy was usually performed in over 5 cm sized high grade lesions.

Follow-up ranged from 2 to 132 months (average 51).

Results: Disease-specific Overall Survival was 86.9 % at 5 years. Local Recurrence and Distant Metastases free survival were respectively 77.6 and 75 %. Marginal or focally contaminated margins occurred in 28 % of surgeries. 16 patients (19%) were affected by local recurrence. 4 of them suffered multiple subsequent recurrences (2 to 4), with only 1 of them developing distant metastases, which occurred in 20% of the patients. A high grade pattern was the only factor significantly affecting OS, LR and DM survival. Tumor size affected DM survival. LR survival at 5 years was 84% in wide-radical excisions and 55% in inadequate margins. We could not statistically prove the effect of radiotherapy.

Discussion: Our series confirm how obtaining wide margins in myxofibrosarcomas is often difficult due to a microscopic spreading in the surrounding tissues. Local recurrence occurs more often than in other soft tissue sarcomas and multiple subsequent recurrences are not rare. Overall survival was 87% in patients without and 85% in patients with local recurrence, showing the feasibility of a limb-sparing surgery also in re-excisions. Preoperative ultrasound mapping and particularly wide surgery (aided by plastic surgery reconstruction procedures) are recommended in this subset of tumors.