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Inappropriate Excisions of Soft Tissue Sarcoma

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Evidence Based Committee
Musculoskeletal Tumor Society
Full Information Statement [here](#)



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Incidence

Inappropriate excisions account for up to 30% of sarcoma referrals



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Inappropriate Excisions Cause Increased Morbidity

Require more complex second surgery

Increased risk of local recurrence

In some cases, diminished survival



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Increased Morbidity

Siegel et al, 2008

54 patients referred after
inappropriate excision

11 (20%) required rotational or
free flaps for coverage

Four (7%) required amputation



Re-excision requiring more extensive surgery, in this case
rotational flap and skin graft



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Increased Local Recurrence

Potter et al, 2008

203 high-grade soft tissue sarcomas, 32% previous excision

Increased rate of local recurrence: 34% vs 6%



Open wound following inappropriate excision of back sarcoma



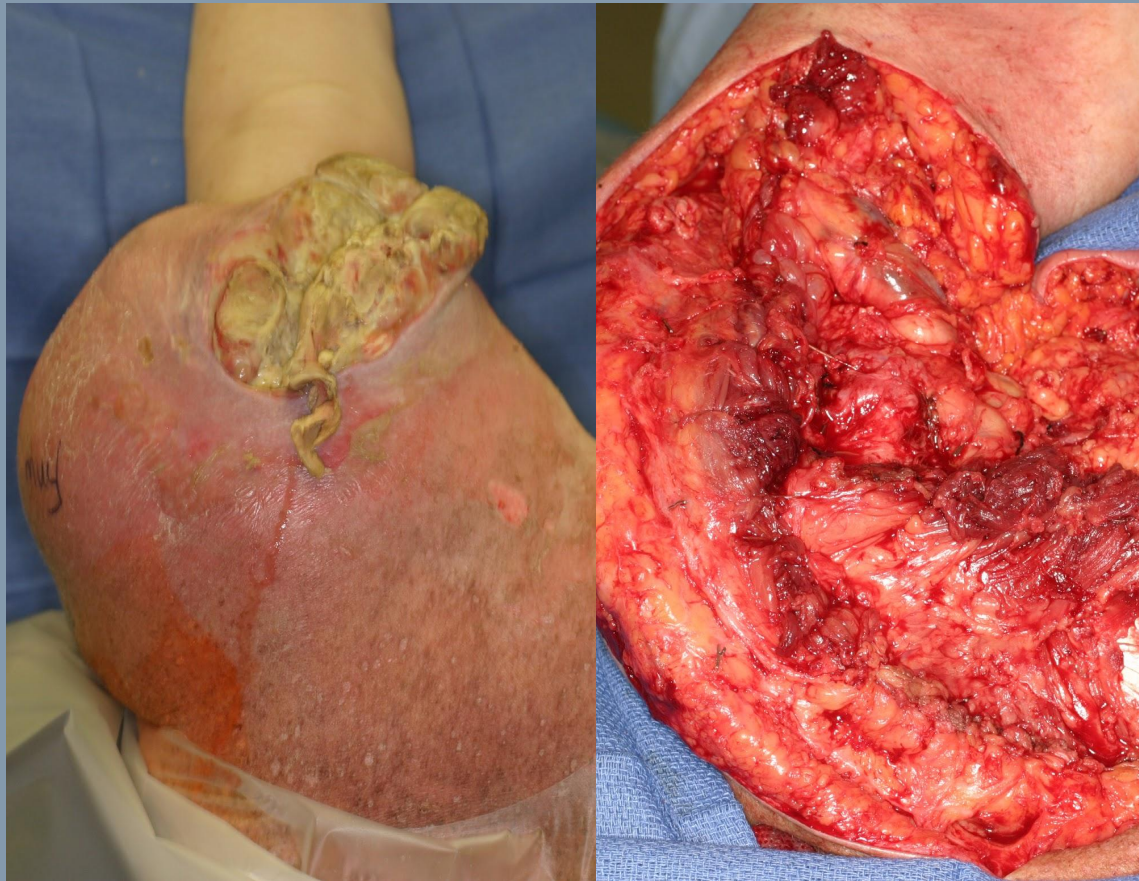
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Increased Local Recurrence

Qureshi et al, 2012

Compared 134 unplanned excisions with matched group of 209 patients

Increase in local recurrence across all groups: 24% vs. 11%



Large, fungating periscapular sarcoma after abandoned excision requiring extensive resection



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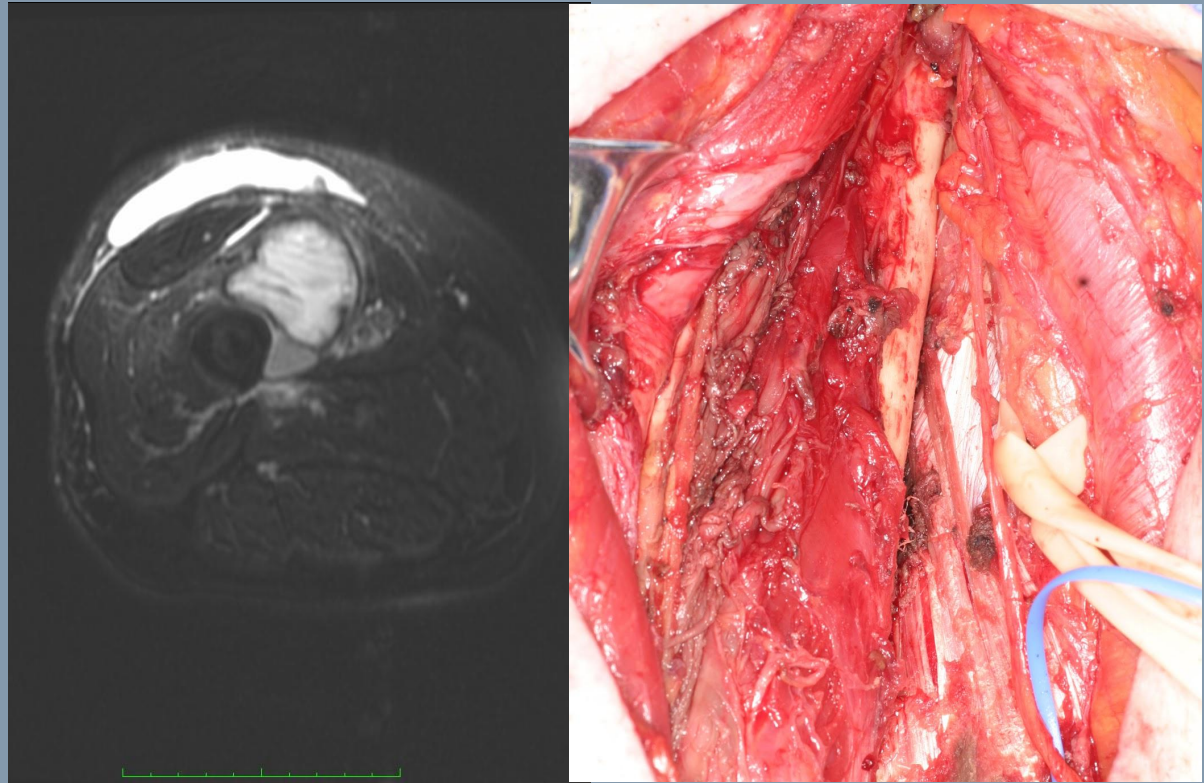
Worse Oncologic Outcomes

Qureshi et al, 2012

For stage III tumors (large, deep & high grade):

Increase in metastatic rate: 39% vs 69%

Diminished disease free and overall survival



Inappropriate excision large deep sarcoma requiring extensive second surgery, despite which patient suffered local recurrence and eventually succumbed



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Referring Specialties



Dyrop et al, 2016

38% (24/24) by a general surgeon

31% (19/64) by an orthopedic surgeon



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Referring Specialties

Venkatesan et al

38% (16/42) treated by a general surgeon

14% (6/42) by a plastic surgeon

14% by an orthopedic surgeon

Siegel et al, 2008

70% (38/54) treated by a general surgeon

20% (11/54) by an orthopedic surgeon

10% (5/54) by a plastic surgeon

Nomenclature

In the past, much of the of the literature on this subject referred to these events as “inadvertent excisions”

To emphasize the risk of additional morbidity to the patient, and because many of these procedures were likely scheduled electively, we believe a more apt description would be “inappropriate excisions”



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Recommendations

1

Soft tissue masses that are larger than 5 cm and enlarging have a high likelihood of being malignant and should be promptly referred to a sarcoma specialist.

[references 4,7]

Inappropriate excision of soft tissue sarcomas should be avoided whenever possible as it exposes patients to additional morbidity from a second, possibly more complex, surgery.

In the case of large, deep sarcomas patients may experience worse oncologic outcomes.

Efforts at physician education should include multiple specialties as the literature reflects that inappropriate excisions are being performed by general and plastic surgeons, in addition to orthopedic surgeons



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