Sarcoma services in New Zealand

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Soft-tissue sarcomas are rare (approximately 1% of all adult malignancies), and most practitioners may only see one in a practising lifetime. However, soft-tissue masses present commonly and are often accompanied by significant patient anxiety. Delaying the diagnosis or inappropriately investigating a soft-tissue sarcoma may compromise a patient’s treatment and ultimate survival. The case report from Blackett in this issue of the Journal is a timely reminder on the appropriate investigation and treatment of soft-tissue sarcoma.

There are four internationally accepted clinical criteria which are used to differentiate between malignant and benign soft-tissue tumours: a mass which is (1) greater than 5 cm in size; (2) increasing in size; (3) deep to the deep fascia; and (4) painful. Should any one of these factors be present then the clinician should consider the diagnosis of a soft-tissue sarcoma.

A magnetic resonance imaging (MRI) scan is the most useful diagnostic tool to investigate these tumours, but it is expensive and seldom available in the primary care setting. An ultrasound examination is often a helpful investigation which is relatively inexpensive and more readily available. It can give information to support the clinical findings (size and position of the mass) and can also comment on the density of the lesion which may help diagnosis.

The diagnosis is made on biopsy and all clinically suspicious lesions should have a tissue diagnosis. Fine needle biopsy is notoriously unreliable in soft-tissue sarcomas and is not indicated for primary diagnosis. Multiple core-tissue biopsies, often under radiological control, or incisional biopsy, should be performed to give the best chance of providing a diagnosis without compromising the management options. Inappropriate or inadequate biopsy is one of the major reasons for poor outcomes in these patients and is associated with a significantly higher chance of local recurrence. Indeed, specialist referral is important to improve patient outcome.

The best results in the treatment of soft-tissue sarcoma have been achieved with multidisciplinary teams comprising pathologists, radiologists, oncologists and orthopaedic surgeons. The pathological diagnosis in these sarcomas can be difficult and often requires the correlation of both the clinical and radiological results. A close working relationship with the multidisciplinary team is important to make the correct diagnosis.

The successful treatment of soft-tissue sarcoma is dependent on complete surgical resection and therefore it is important that the surgeon is aware of the position of the biopsy tract to avoid local recurrence. Preoperative radiotherapy is often used to reduce the size of the lesion to allow wide resection and limb salvage which demands close communication between the radiation oncologist and the surgical team to stage treatment and initiate surgery at the optimal time for the best tissue response.
The National Institute for Health and Clinical Excellence\(^1\) (NICE 2006) have provided management guidelines for patients with suspected soft-tissue sarcoma which have largely been adopted by the New Zealand Guidelines Group.\(^6\) These guidelines indicate that all potential sarcomas should be referred for immediate specialist evaluation.

In New Zealand there are two established Sarcoma Units (in Auckland and Christchurch, respectively), which have been developed in conjunction with the New Zealand Orthopaedic Association and the Ministry of Health to give a comprehensive service throughout the country. Each of these Units has a multidisciplinary team who provide and coordinate a management plan for each patient. These Units offer access to both specialist and primary care physicians with patients being assessed within 2 weeks of referral.\(^4\)

Practitioners working outside these two main centres should refer patients to their local orthopaedic surgeons. The outcome following soft-tissue sarcoma has improved largely due to the use of these teams to co-ordinate treatment options in a controlled and systematic approach.

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**References:**