

Sarcoma treatments

The Bone and Soft Tissue Tumour Service provides a range of treatment options for patients.

Surgery

A comprehensive range of surgery is provided by the Bone and Soft Tissue Tumour Service. Surgery is performed with curative or palliative intent. Occasionally, a multidisciplinary decision is made to withhold surgery.

Virgin tumours are normally resected after neoadjuvant therapy. Pre-operative radiotherapy is given for soft tissue sarcomas and pre-operative chemotherapy is given for selected bone sarcomas.

The principles of surgery include

1. Ensuring adequate and appropriate investigation including biopsy prior to surgery.
2. Ensuring that multidisciplinary expert consideration is given prior to surgery.
3. Ensuring adequate oncologic surgical margins.
4. Including the biopsy track en bloc with tumour specimen where possible.
5. Attempting limb sparing surgery where possible.
6. Early involvement of plastic surgical team for soft tissue reconstructions.
7. Surgery should always be done by experts in the field of sarcoma surgery.

Sarcomas are classified by location and will require different surgical considerations. Specific surgical teams within the sarcoma service may undertake resections related to these sites.

1. Trunk wall, pelvis and limbs
2. Retroperitoneum and abdomen
3. Head and neck

The timing of surgery follows specific guidelines.

1. Surgery for soft tissue sarcomas is undertaken 4-6 weeks after radiotherapy. Under special circumstances, post-operative radiotherapy is provided. This may be initiated after the surgical wound has healed. Usually 4 weeks after surgery and preferably before 6 weeks.

2. Surgery for bone sarcomas that require chemotherapy are undertaken usually 2 weeks after a predetermined chemotherapy cycle when blood indices allow and after consultation with the medical oncology team.

Surgical care supervised by the sarcoma service is provided at St. Vincent's Hospital and Peter MacCallum Cancer Centre.

Radiation Oncology

Suitably qualified sarcoma radiation oncologists will provide radiotherapy.

The team will deliver radiotherapy services enabled by state-of-the-art resources. Treatment protocols will be evidence-based and conform to international guidelines. They will be published in the Quality Management System (QMS) and will be reviewed yearly. All treatments will be delivered according to the documented QMS guidelines.

All new radiotherapy treatment plans will be reviewed at the weekly radiotherapy QA meeting before commencement of treatment. This meeting will be attended by the treating clinician and at least 2 other radiation oncologists and radiation therapists.

Radiotherapy charts of all patients on treatment will be reviewed at the radiotherapy QA meeting every week. All patients are to be reviewed by the radiation oncology nurse in the first week of treatment.

Treatment related toxicity will be documented weekly on standardized toxicity templates.

Clinical trial participation is to be actively encouraged.

Radiotherapy will be delivered at Genesis Care – St Vincent's or Peter MacCallum Cancer Centre.

Medical Oncology

Chemotherapy can be considered either as systemic adjuvant treatment with the primary goal of treating microscopic disease at the time of initial presentation, or as a complement to local treatment by surgery or radiation. In the latter setting, the goal of chemotherapy is to 'downstage' the tumour enabling surgery or radiation to achieve local disease control sometimes with reduced morbidity. Tumour shrinkage or percentage necrosis after pre-operative chemotherapy may also



provide important prognostic information, enabling informed treatment decisions after completion of local treatment.

Suitably qualified sarcoma medical oncologists will recommend and supervise chemotherapy.

Treatment protocols will be evidence-based and conform to international guidelines. All treatments will be delivered according to the documented QMS guidelines.

All new chemotherapy treatment plans will be reviewed at the weekly chemotherapy QA meeting before commencement of treatment. This meeting will be attended by the treating clinician and at least 2 other medical oncologists. A paediatric medical oncologist will supervise the development of chemotherapy treatment plans for adolescent and young adults.

Chemotherapy will be delivered at Peter MacCallum Cancer Centre