

The role of the specialist sarcoma physiotherapist in the management of patients with bone and soft tissue sarcoma

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Introduction

Sarcomas are rare tumours arising from connective tissue (bone, muscle, nerves, fat, cartilage, etc). They account for approximately 1% of all cancer diagnoses. Most sarcomas affect limbs, most frequently the leg, but can also be found in the head and neck area, trunk and retroperitoneum.

Sarcomas fall into three broad categories, soft tissue, bone and gastro-intestinal stromal tumours (GIST), but there are many sub-types of sarcoma, determined by the histological sub-type.

A diagnosis of sarcoma and subsequent treatment can have a major effect on the function and quality of patients' lives; it is an unscheduled event usually causing interference with the ability to move the body freely and economically thereafter.

Treatment may involve extensive surgery in the form of an endoprosthesis (joint and bone) replacement, amputation or tumour dissection. In addition patients usually undergo adjuvant chemotherapy and/or radiotherapy which often have a major impact on mobility and function.

Evidence

- The NICE guidelines 'Improving Outcomes for People with Sarcoma', March 2006, recommend that all patients with a confirmed diagnosis of Sarcoma should have their care provided by a specialist sarcoma MDT at a specialist treatment centre. The MDT members should include surgeons, radiologists, oncologists, nurses, physiotherapists and occupational therapists.
- Rehabilitation of patients with sarcoma is highly specialized. Each sarcoma MDT should have a specialist sarcoma physiotherapist and other specialized AHPs as required, with expertise in sarcomas. This would ensure that patients receive a coordinated and seamless rehabilitation programme, when and where they need it (NICE 2006).
- Post-treatment rehabilitation helps the patient maximise the benefits of treatment, and aims to improve physical, social and emotional outcomes both during and following treatment (NICE 2004).

Objective

The specialist physiotherapist on the MDT enables rehabilitation to be provided in a timely and coordinated way. The aim is to ensure that the patient is able to access physiotherapy and advise, if they need it, at all stages of the pathway: at diagnosis, on commencement of treatment, during and on completion of treatment, disease recurrence, palliative stages and at the end of life.

Pre-op physiotherapy

The physiotherapist attends the weekly MDT and is able to advise on how the proposed treatment will impact on mobility and function. Patients are seen initially in clinic where a baseline assessment is performed and any immediate physical needs can be addressed. Once the patient has been given a diagnosis, we are there to provide psychological support at this difficult time. Advanced communication skills are vital to allow the patient to talk through their main concerns. Support and rehabilitation throughout pre-op chemo is vital and the aim is to maintain mobility and muscle strength to ensure the best possible functional outcome post-op.



Sarcoma Support group

NICE (2006) states support post-op should include psychological and spiritual support, access to self help groups.....

In Manchester a support group has been running for many years for patients and families affected by bone and soft tissue sarcomas. Patients find this a very beneficial and supportive forum to learn about different aspects of the treatment and gain valuable support from each other.

Manchester Sarcoma Support Group

NICE (2006) states support post-op should include psychological and spiritual support, access to self help groups

- Meetings every two months
- Speakers and open forum to discuss issues relevant to group

Living with Sarcoma?

Need to know more?
Feeling isolated?
Newly diagnosed?
Supporting someone with sarcoma?

Manchester Sarcoma Support Group

In Manchester, we have a support group for patients and their families affected by bone and soft tissue sarcomas. We meet once a month and the program consists of a variety of guest speakers, one-to-one advice sessions, as well as an open forum to discuss issues which are relevant to group members.

The meetings are held for all: Patients and their families, and Manchester, Stockport, Salford, Trafford and Oldham. The meetings are held for all: Patients and their families, and Manchester, Stockport, Salford, Trafford and Oldham. The meetings are held for all: Patients and their families, and Manchester, Stockport, Salford, Trafford and Oldham.

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Post-op physiotherapy

For those patients who have already undergone surgery, post-operative rehabilitation aims to regain maximal range of movement, muscle power and function. It should begin as soon as possible following surgery, because radical radiotherapy, if appropriate, is given soon after surgery. It is imperative at this stage to help the patient return to as full function as possible through a tailor made exercise program, gentle scar tissue management, using connective tissue massage and appropriate advice. It is important that the patient is aware of any likely and inevitable disability imposed by the extensive surgery, which often involves resection of large muscle groups and often amputations.

Radiotherapy treatment

The time following surgery and prior to radiotherapy is an important window of opportunity to restore as much range of movement, muscle strength and function as possible.

- Each radiotherapy fraction will cause tissue injury, which is also known as fibrosis, and the standard dose for sarcomas causes considerable tissue insult.
- Damage is done at multiple levels: from superficial and deep tissue fibrosis of skin, all soft tissue including muscle and connective tissue down to bone, of course also nerves and vessels.
- The functional problems will depend on the anatomical site involved, but in general we can anticipate: Pain, neuropathy, loss of movement, and often distal lymphoedema.

The aim of physiotherapy during radiotherapy is to:

- Teach the patient stretching exercises to reduce the stiffening effect of the radiotherapy.
- To continue to improve muscle strength and mobility.

Conclusion

It is essential that the physiotherapist has an in-depth understanding of all aspects of sarcoma: the treatment modalities, functional and psycho-social issues, the impact of disease progression, etc. Rehabilitation is often intensive and may take months and sometimes years. The physiotherapist will spend many hours with the patient and develops a close relationship where practical as well as emotional advice and counselling become part of the treatment. In the event of metastatic disease, the physiotherapist continues to offer support and helps to maximize independence and function even in the end stages of the disease.