

Rotation Specific Goals and Objectives

Musculoskeletal Oncology

The following document is intended to guide you in some of the specific knowledge and skills you must develop during your training. We do not have a formal Oncology Rotation.

Knowledge will be gained through our comprehensive Basic Science Rounds on tumors which occur every other year, as well as by participation in our Combined Pathology Rounds with Pathology and Medical Imaging. In addition attendance at the COA Basic Science Course (PGY 4s) which has a detailed tumor section is mandatory. Practical experience in the Clinic and OR will be obtained on all rotations where tumors present and are treated as part of these other rotations.

If you wish further exposure, and elective in Oncology (PGY 3,4,5) may be arranged.

It is understood that a residency in Orthopaedics is a continuum. Senior residents will be able to meet the same objectives as junior residents as well as the senior objectives.

1. MEDICAL EXPERT

• Cognitive and Diagnostic

o Junior/Senior Resident

- Obtain appropriate history and perform physical examination relating to a tumour and be competent in assessing the following:
 - Size of the tumour and its relationship to Fascia
 - Neurovascular and articular involvement
 - Lymphatic involvement
 - Sites of metastatic potential for primary MSK tumours
 - Organs systems likely to metastasize to the MSK system
 - Tumour characteristics including issues specific to age and gender
- Describe the different tumour classes and their behaviour:
 - Primary lesions
 - Benign
 - Benign Aggressive
 - Malignant
 - Metastatic lesions
- Describe the presentation, radiologic characteristics and natural history of the most common primary bone tumour types:
 - Chondroid lesions
 - Osteoid lesions
 - Fibrous lesions

- Others- unicameral bone cyst, hemangioma, histiocytosis, lipoma, eosinophilic granuloma, giant cell tumour, aneurysmal bone cyst, ewings sarcoma, adamantinoma, chordoma, hemangiopericytoma
- Describe the presentation, radiologic characteristics and natural history of different primary soft tissue tumour types:
 - Fibrous lesions
 - Lipoid lesions
 - Muscle lesions
 - Vascular lesions
 - Nerve lesions
 - Others - myxoma, fibrosarcoma, malignant fibrous histiocytoma, pigmented villonodular synovitis, giant cell tumour of tendon sheath, myositis ossificans, tumoral calcinosis
- For a given MSK tumour:
 - Formulate a differential diagnosis and stage the tumour (according to the Enneking Musculoskeletal Tumour Society (MSTS) System)
 - Describe the appropriate biopsy principles of MSK tumours.
 - Formulate a treatment plan for the different tumour types
 - Describe the multidisciplinary approach to
 - o curative treatment
 - o palliative care
- Formulate treatment plans for complications in MSK oncology surgery.

• **Technical**

o Junior/Senior Resident

- To be able to perform with proficiency:
 - Open biopsy of bone and/or soft-tissue lesion
 - Stabilization of metastatic disease
 - Treatment of common benign tumours

2. COMMUNICATOR

- Deliver information to patients and family in a humane manner so that the patient and family understand the options of care and are able to participate in the decision-making process
- Demonstrate an ability to listen effectively and address patients concerns
- Develop strategies for delivering bad news and discussing end of life decisions
- The ability to obtain an appropriate informed consent for patients undergoing interventions.

3. COLLABORATOR

- Develop a working relationship with pathologists, radiologists and members of the Cancer Clinic

- Describe support groups in the community who can assist the oncology patient and their families
- Effectively communicate with others involved in the multidisciplinary care of the oncology patient
- Provide timely and appropriate consultation as requested

4. MANAGER

- Prioritize the investigation and management of the oncology patients
- Understand the balance of allocation of healthcare resources, balancing effectiveness, efficiency and access with optimal patient care
- Describe appropriate waiting times for the oncology patient

5. HEALTH ADVOCATE

- Understand the risk factors associated with the development of a malignancy
- Describe strategies to decrease the societal risk of malignancy
- Communicate to patients their individual risk factors

6. SCHOLAR

- Prepare and present an appropriate lecture/presentation including critical appraisal of the literature; describe how this information could be integrated into practice

7. PROFESSIONAL

- Demonstrate ethical practice in the management of the oncology patient including respect for issues regarding gender, ethnicity, religion, age and cultural.
- Demonstrate honesty, integrity, commitment, compassion, respect and altruism