

MS Orthopedic Training

Total Duration: 5 years

Orthopedic Rotations: 4 years

Surgery & Allied Rotations: 1 year

General Surgery: 6 months

Neurosurgery: 03 months

Emergency room: 03 months

Key to Competency Levels in Clinical Skills

1. Observer status
2. Assistant
3. Performed under supervision
4. Performed independently (indirect supervision)

Clinical skills	Level of Competency				
A. Patient management	1 st year	2 nd year	3 rd year	4 th year	5 th year
Formulating a working diagnosis	2	3	3	4	4

Decision for ambulatory care/hospitalization referral	2	2	4	4	4
Ordering investigations and interpreting them	2	3	3	4	4
Deciding and implementing treatment	1	2	2	3	4
Following up of patients	2	3	4	4	4
Prescription writing	2	3	4	4	4

Emergency management of polytrauma	1	2	3	3	4
B. Procedures					
Traction application	2	3	4	4	4
Application of casts & splints	1	2	3	4	4
Surgical preparation (scrubbing, prepping & draping)	2	3	4	4	4
Debridement	1	2	3	3	4

Soft tissue handling	1	2	2	3	4
Applying sutures	2	3	4	4	4
Intraarticular injections	1	2	3	4	4
Closed treatment of dislocation of					
a. Shoulder, hip, elbow, small joints of hands	1	2	2	3	4
b. Fracture of tibia, fibula, radius and ulna, humerus, feet					

External fixation of fracture of lower limb (tibia & femur)	1	2	2	3	4
External fixation of fracture of upper limb	1	2	2	3	4
Skin grafting	1	2	2	3	4
Biopsy for tumors (musculoskeletal)	1	2	3	4	4
Bone grafting	1	2	2	3	4

I/M nailing of long bones	1	2	3	4	4
Open reduction internal fixation	1	2	2	3	4
Nerve repair	1	2	2	3	4
Tendon repair	1	2	2	3	4
Fixation of hip fractures	1	2	3	3	4

Fixation of lower end of femur, humerus, radius and ulna	1	2	2	3	4
Osteomyelitis	1	2	2	3	4
Arthrodesis	1	2	2	3	4
Treatment of CTEV by PONSETI	2	3	4	4	4
Treatment of DDH	1	2	2	3	4

Contracture release	1	2	3	3	4
Amputations	1	2	3	4	4
Hemiarthroplasty	1	2	3	4	4
Total joint replacement THR	1	2	2	3	4
Total joint replacement TKR	1	2	2	3	4
Limb salvage (tumor surgery)	1	2	2	3	3
Arthroscopy	1	2	3	4	4
Application of illizarov external fixator	1	2	3	4	4
Percutaneous fixation of fractures	1	2	2	3	4
Spinal instrumentations	1	2	2	3	3
Microdiskectomy	1	1	2	2	3

During orthopedic rotations trainees will acquire knowledge and clinical skills in following areas of orthopedic surgery.

Subspecialty	Training contribution	Credit hours			
1. Orthopedic trauma	30%	(875 credit hours)			
		2nd year 218 hrs	3rd year 218 hrs	4th year 218 hrs	5th year 218 hrs
Poly trauma		43	43	43	43
Upper limb trauma		43	43	43	43
Lower limb trauma		43	43	43	43
Trauma to pelvic ring & acetabulum		43	43	43	43
Spinal trauma		43	43	43	43
2. Musculoskeletal tumors	10%	(292 credit hours)			
		2nd year 73 hrs	3rd year 73 hrs	4th year 73 hrs	5th year 73 hrs
Benign Soft tissue tumors		18	18	18	18

Malignant Soft tissue tumors	18	18	18	18	
Benign bone tumors	18	18	18	18	
Malignant bone tumors	18	18	18	18	
3. Bone & joint infections	15%	(438 credit hours)			
		2nd year 109 hrs	3rd year 109 hrs	4th year 109 hrs	5th year 109 hrs
Septic arthritis	36	36	36	36	
Osteomyelitis	36	36	36	36	
Soft tissue infections	36	36	36	36	
4. Adult reconstructions	15%	(438 credit hours)			
		2nd year 109 hrs	3rd year 109 hrs	4th year 109 hrs	5th year 109 hrs
Total hip replacement	36	36	36	36	

Total knee replacement		36	36	36	36
Total shoulder replacement		36	36	36	36
5. Sports injuries	08%	(233 credit hours)			
		2nd year	3rd year	4th year	5th year
		58 hrs	58 hrs	58 hrs	58 hrs
Shoulder instability		11	11	11	11
Rotator cuff tear		11	11	11	11
Impingement		11	11	11	11
ACL injuries		11	11	11	11
Meniscal injures		11	11	11	11
6. Pediatric orthopedics	07%	(204 credit hours)			
		2nd year	3rd year	4th year	5th year
		51 hrs	51 hrs	51 hrs	51 hrs

Club foot management		25	25	25	25
DDH management		25	25	25	25
7. Spine	15%	(438 credit hours)			
		2nd year 109 hrs	3rd year 109 hrs	4th year 109 hrs	5th year 109 hrs
Prolapsed intervertebral disc		27	27	27	27
Degenerative spine		27	27	27	27
Spinal deformities		27	27	27	27
Spinal tumors		27	27	27	27