

MS ORTHOPAEDICS

1. Methods of Clinical Examinations
2. Basic Sciences

- (A) Structure & functions of Bone Cartilage Synovium Muscle Ligament Tendon
- (B) Relevant surgical Anatomy of Axial and appendicular skeleton
Physiologic basis of functioning of skeletal system
- (C) Biochemical basis of function of Bone
- (D) Pathologic basis of Orthopaedic diseases
- (E) Pharmaco therapeutics in Orthopaedics
- (F) Microbiological basis of Orthopaedic infection
- (G) Orthopaedic implants, Metals, Corrosion, Lubrication and implant failure
- (H) Research Methodology
Refining a research question, Steps involved in refinement, formulating a hypothesis, steps involved in preparation of research protocol, data collection and data presentation
- (I) Statistics
- (J) Level of evidence

3. Traumatology

Injuries of axial and appendicular skeleton and associated soft tissues, their clinical examination, radiography and modes of treatment

General Consideration: Fracture healing,
Conservative treatment of fractures
Internal fixation
principles External
fixation principles
Open fractures
Pathologic fractures
Bone grafting Poly Trauma Trauma
Care
Individual injuries to upper limb, lower limb, spinal column,
shoulder girdle and pelvis girdle in detail

4. Diagnostic Imaging in Orthopedics Radiography

MRI and CT scan Nuclear Medicine Ultrasonography

5. Metabolic Bones diseases
6. Endocrine disorders of Bone
7. Bone & Joint infection
8. Poliomyelitis of skeletal system
9. Cerebral palsy and other spastic disorders

10. Systemic complication in Orthopedics

Shock
Crush syndrome
DIC
Thromboembolism
Fat Embolism syndrome
Gas gangrene
Tetanus

11. Orthopaedic anaesthesia, Regional blocks, Pain management and Care of critically ill patient
12. Neoplasms of Bone & Joint
13. Osteoarthritis
14. Rheumatoid arthritis
15. Disorders of synovium
16. Peripheral Nerve injuries and dysfunction
17. Biomaterials in orthopaedics
18. Ilizarov – Basic principles and principles of deformity correction
19. Arthroscopy
20. Arthroscopy
21. Hand injuries with reconstruction principles
22. Re implantation
23. Regional Orthopaedic disorders
24. Congenital anomalies
25. Paediatric Orthopaedics
26. Analysis of Gait
27. Microsurgery in Orthopaedics
28. Arthrodesis
29. Prosthetics and Orthotics
30. Amputation
31. Rehabilitation Orthopaedics
32. Disability evaluation
33. Bone substitutes
34. Recent advances in Orthopaedics