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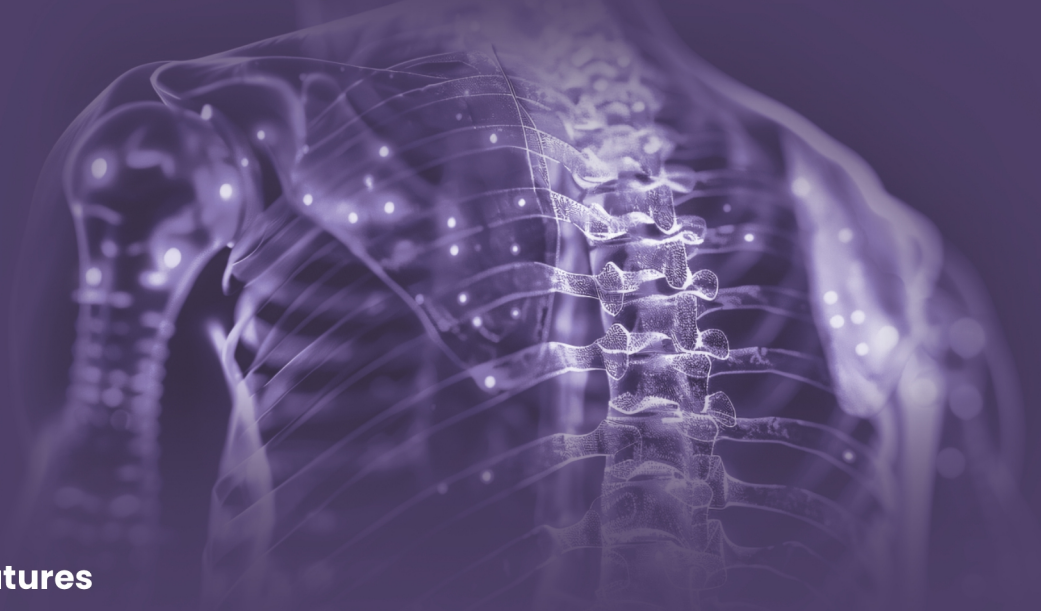
Flowcharts • Tables • MCQs • One-Liners

Updated Edition 2025

ONE Touch Orthopedics

For NEET PG/NEXT/FMGE/INI-CET



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ONE Touch Orthopedics

For NEET PG/NEXT/FMGE/INI-CET

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Preface

All My Dear Students!

Thank you so much for the respect, love, warmth, affection and faith you all have bestowed on me and my teachings. Your love always pushes me to teach you in the simplest, updated and best possible clinical manner.

One Touch Orthopedics has everything that you need to know about orthopedics in just around 200 pages. I have condensed the text and arranged it in a manner that makes it easier for you to revise orthopedics in the shortest possible time without compromising on concepts. Moreover, keeping in mind the latest trend of Qs, integrated Qs and integrated concepts of orthopedics with other subjects like anatomy, radio, medicine too have been taken care of.

I am sure you will be able to understand the concepts of orthopedics from this book; and it will help you answer all your questions. Besides, you will be able to guide your patients after studying this book.

Purpose of the Book

To make the students understand the concepts of Orthopedics in a crisp and concise manner.

Features of the Book

- **Theory:** Entire theory of Orthopedics has been given in the form of flowcharts and tables.
- **Images:** The book contains illustrations, X-rays and clinical images.
- **Important Updates:** All important updated topics and MCQs have been covered.
- **PYQs:** The PYQs of NEET, INI-CET and FMGE exams have been covered from the last 5 years and they have been marked separately.

How to Use the Book

- If you have already read the subject from any source—online app/offline class—use this book as a source of revision/quick recap by using tables/flowcharts. Do not forget to go through the PYQs at the end of the book.
- If you have not read the subject earlier, read the text, solve PYQs; and if you mark questions wrong, revise all the images, flowcharts and tables to understand the concepts.

Is this enough for entrance exams?

Yes; if you revise it properly, it is enough for any entrance exam.

The only thing which you have to do is to understand the concepts and revise them thoroughly and solve the PYQs.

Just remember, "nothing can stop you if you put your mind to it. All it takes is a change of your mindset. Trust yourself, be confident, be consistent and keep going".

I am thankful to Dr Aroop Mukherjee Sir, Dr Arwind Diwakar Sir, Dr Abhijeet Salunke, Dr Harshit Shankar, Dr Susheel Chaudhary, Dr Jignesh Patel and all my colleagues who have given me support while writing this book.

If you come across any other typographical errors, please message me on my insta handle— dr.sushilvijay

With lots of love and blessings. Keep smiling. All the Best!

Sushil Vijay

From the Publisher's Desk

Dear Students,

Let us begin with a power-packed and inspiring quote:

> Arise, awake, and stop not until the goal is achieved.
>
> —**Swami Vivekananda**

Healthcare is undoubtedly one of the most noble and sacred professions. We are truly fortunate to be a part of this field, which stands as a beacon of selfless service to humanity. Healthcare professionals work tirelessly, transcending boundaries of caste, creed, religion, community, nationality, and preferences. Their service is a testament to the divine nature of this profession.

We extend our deepest gratitude to all healthcare professionals for their unwavering commitment, particularly during the pandemic. When the world retreated behind closed doors, these brave individuals stood on the frontlines, leaving no stone unturned in saving the lives of people.

At CBS Publishers, we take great pride in supporting the healthcare community by offering resources that empower future professionals. Ten years ago, we laid the foundation of the PGMEE segment with titles such as the **Conceptual Review Series, SARP Series, AIIMS MedEasy, NIMHANS, PGI Chandigarh, My PGMEE Notes, ROAMS, PRIMES, FMGE Solutions** and many more.

What makes our PGMEE books stand out is the updated, simple, clear, and easy-to-understand language, making study sessions feel less like a challenge and more like an enjoyable learning experience. A team of our esteemed medical educators brings their expertise to create these comprehensive yet compact books, ensuring that all the critical topics are covered.

A special feature of our books is the use of illustrations that simplify complex concepts, making them easier to grasp. We have also included previous years' questions, complete with detailed explanations, which are invaluable for exam preparation. Image-Based Questions (IBQs) further enhance the learning experience. The combination of concise theory and multiple choice questions makes these books the ultimate tool to ease exam-related worries.

FMGE Solutions is one of our best-selling titles, meticulously designed to meet the specific needs of FMGE aspirants. This comprehensive guide is an all-in-one resource for FMGE preparation, offering in-depth coverage of essential topics, detailed explanations, and a wide array of questions that reflect the latest exam patterns. Its reputation as a bestseller speaks of its effectiveness and reliability as a trusted resource for future medical professionals.

One Touch Series has been tailored specifically for aspirants of NEET PG, NExT, FMGE, and INI-CET. Conceptualized with a focus on last-minute revision, the **One Touch Series** covers a complete range of preclinical, paraclinical, and clinical subjects. These concise, expertly curated books have been designed to help students efficiently review key concepts, ensuring they are well-prepared and confident as they approach their exams.

This year, we have introduced a new addition to the CBS Exam Book Series: **Ten into Ten** (Part A and B). According to market research, at present no book is available for practice and this new addition to our exam book series will fill this gap for sure. Although there are multiple apps from where students can

attempt test series online, not a single updated book is available in the market for offline practice, and this book now in your hand will fill this vacuum. The motto of this book is Practice: Practice: Practice as this book offers a decent amount of MCQs which will meet the evolving needs of students. **Ten into Ten** is a comprehensive question bank covering 19 medical subjects. It offers over 10,000 meticulously curated questions across 10 key subjects, crafted by 10 renowned medical scholars.

Following this, we will soon release the next part, **Nine into Nine**, further expanding our collection of practice material for the PGME Examination, with the latest and most effective study approaches.

At CBS, we are committed to revolutionize the medical education; and your support and encouragement can make our task easier. So, keep extending your support by sending feedback to us. We will be highly pleased to serve you and make you victorious in your career. You can share your feedback at feedback@cbspd.com

Wishing you all the best in your endeavors.

Mr Bhupesh Aarora
(Sr. Vice President – Publishing & Marketing)
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Contents

THEORY

3 Trauma and Regional Conditions

PART A—BASICS

Fracture: It is defined as break in continuity of cortex of bone.

CLASSIFICATIONS

A. On the basis of etiology
B. On the basis of relationship with external environment
C. On the basis of pattern of fracture
D. On the basis of deformity at fracture site
E. On the basis of extent of fracture

A. ON THE BASIS OF ETIOLOGY

Traumatic Fractures

- **Direct impact:** Usually causes transverse fracture
- **Indirect force:** Forceful contraction of quadriceps leading to fracture of patella)

Pathological Fractures

Causes

- **Local diseases:**
  - Infections (Osteomyelitis)
  - Bone tumors (Benign or malignant)
- **General diseases:**
  - Congenital disorders like osteogenesis imperfecta
  - Metabolic: Rickets, Osteomalacia, Osteoporosis (mc), PYQ etc.
  - Disseminated diseases like multiple myeloma
  - Diffuse involvement of bone, like in Paget's diseases

Examinations

- Infective condition may have associated infected sinus swelling or deformity.
- Osteoporotic patients may have pain over common sites like pubic rami or neck of femur. They may also have a loss of height due to involvement of vertebra.
- Malignancy or secondary deposits may have associated enlargement of lymph nodes. There may be wasting of muscles palpable mass in abdomen. There may be associated anemia, loss of weight, loss of appetite in these patients.

Treatment

It depends on the cause suspected and the underlying pathological condition.

B. ON THE BASIS OF RELATIONSHIP WITH EXTERNAL ENVIRONMENT

- **Simple or Closed Fracture**
- **Compound or Open Fracture**

Open Fracture

When the fracture site communicates with external environment

Classification of Open Fracture

Gustilo Anderson classification

- **Type I:** Open fracture with a clean wound <1 cm.
- **Type II:** Open fracture with wound >1 cm, but without extensive soft tissue damage or avulsion.
- **Type III A:** Open fracture with extensive soft tissue lacerations or flaps but adequate soft tissue coverage of bone. This group includes segmental or comminuted fractures.
- **Type III B:** Extensive soft tissue loss, with periosteal stripping and bone exposure. These fractures are contaminated.
- **Type III C:** Open fracture with an arterial injury that requires surgical repair (Irrespective of size of wound).

Figure 1: Simple or closed fracture

Figure 2: Compound or open fracture

Extra Edge

What should be the grade of Gustilo anderson for the fracture of femur with wound size 0.8 cm and distal pulse not palpable? — Type I/Type II/Type IIIa/Type IIIc

→ Type IIIc

APPROACH TO A CASE OF POLYTRAUMA

Step I: Primary Survey

Mnemonic: ABCDE

- **A—Airway** should have no obstruction with cervical spine immobilization. PYQ
- **B—Breathing:** Adequate gas exchange should be there to maximize O_2 intake and CO_2 elimination.
- **C—Circulation:** Both central and peripheral, the capillary refill should be good, blood volume, cardiac output and bleeding (the source for which should be identified as early as possible).
- **D—Disability evaluation** of musculoskeletal, urological, reproductive and neurological injuries and which is done by Glasgow coma scale.
- **E—Exposure and environment control:** Prevent hypothermia in polytrauma patients.

Glasgow Coma Scale PYQ

Behavior	Points	Behavior	Points
Eyes open		**Best motor response**	
Spontaneous	4	Obeys commands	6
To sound	3	Localizes pain	5
To pain	2	Flexion withdrawal	4
Never	1	Abnormal	3
Best verbal response		Extension	2
Oriented	5	None	1
Confused conversation	4		
Inappropriate words	3		
Incomprehensible words	2		
None	1		

Maximum score = 15, minor head injury = 13–15, moderate = 9–12, severe = 3–8, coma = ≤7, brain death = 3

New Score—GCS-P

The GCS-P is calculated by subtracting the Pupil Reactivity Sore (PRS) from the Glasgow Coma Scale (GCS) total score:

- GCS-p
- The pupil reactivity sore is calculated as follows:

Pupils unreactive to light – Score

- Both pupils – 2
- One pupil – 1
- Neither pupil – 0

- **Significance:** Considered as more comprehensive assessment of Brain injury severity.

New Score—RTS

RTS	Glasgow Coma Scale	Systolic blood pressure (mm Hg)	Respiratory rate (breaths/min)
4	13–15	>89	10–29
3	9–12	76–89	>29
2	6–8	50–75	6–9
1	4–5	1–49	1–5
0	3	0	0

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PART B—UPPER LIMB: TRAUMA AND REGIONAL CONDITIONS

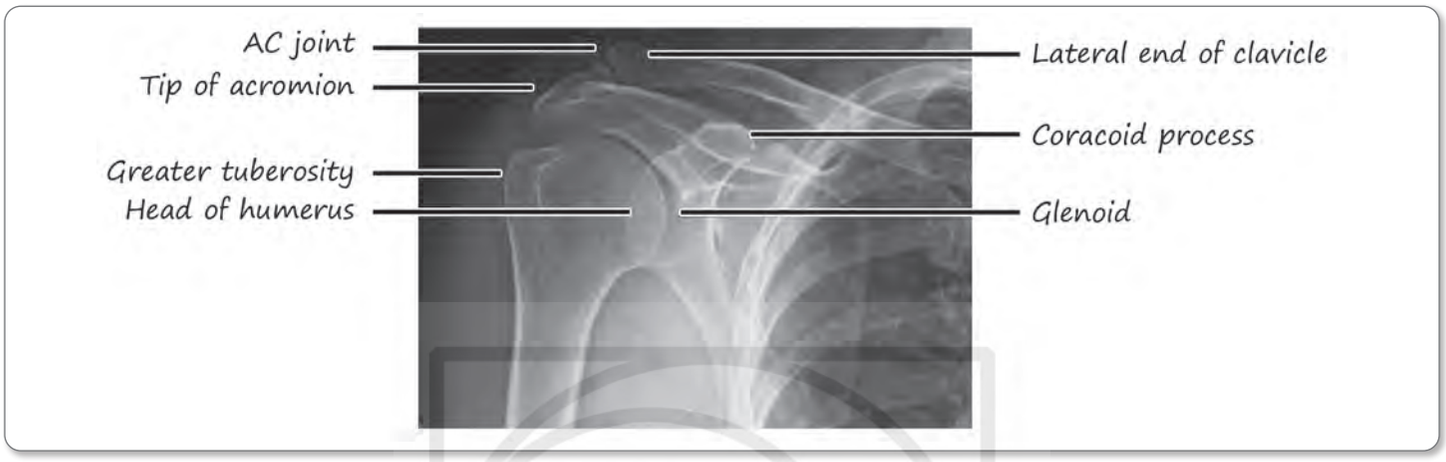


Figure 10: Shoulder AP view

Muscles with action:

- **Supraspination:** 0°–15° abduction
- **Infraspinatus:** External rotation
- **Teres minor:** External rotation
- **Subscapularis:** Internal rotation

Important One-Liners

- Most common muscle to get injured is supraspinatus
- IOC → MRI PYQ

Rotator Cuff

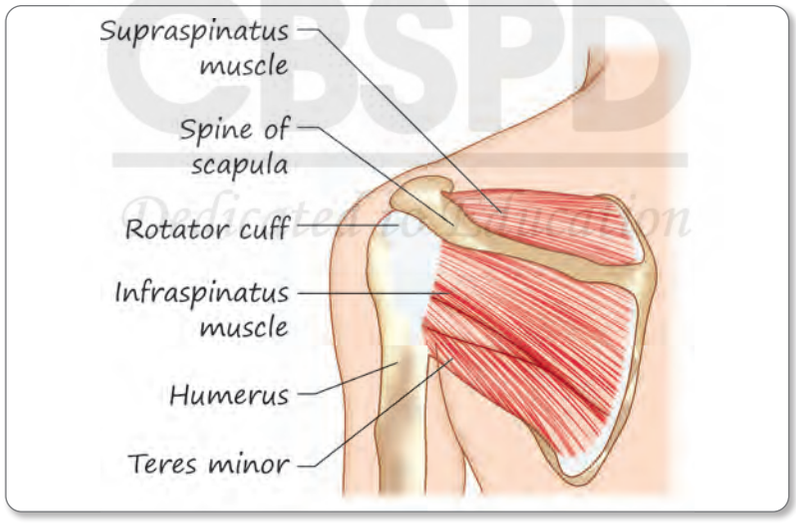


Figure 11: Rotator cuff

SHOULDER

Contd

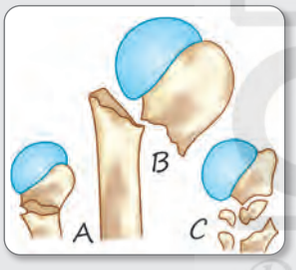
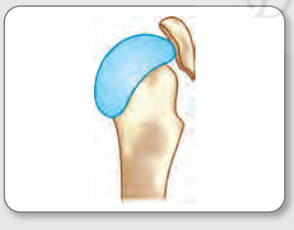
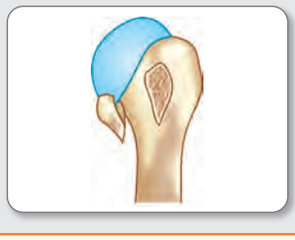
BASED ON FRACTURES OF HUMERUS

Proximal Humerus

- Neer's classification:
  - 2 parts fracture
  - 3 parts fracture
  - 4 parts fracture
- **Complications:**
  - Axillary nerve injury
  - Stiffness of shoulder
  - Malunion
  - AVN of humeral head

Figure 27: Proximal humerus fracture

Neer's Classification

	2-part	3-part	4-part
Anatomic neck			
Surgical neck			
Greater tuberosity			
Lesser tuberosity			

Shaft of Humerus

- MC involves—radial nerve
- Produces—wrist drop/finger drop and loss of sensation at dorsum of hand

Figure 28: Shaft of humerus fracture

Spiral fracture → Holstein Lewis fracture

Figure 29: Spiral fracture

Contd...

Complications

Immediate/early complications	Late complications
1. **Nerve injury:** Most common nerve to be injured is anterior interosseous nerve (AIN)	1. **Malunion:** Cubitus varus deformity, which is also known as gunstock deformity. **Treatment:** French osteotomy/Dome osteotomy
2. **Brachial artery injury**	2. **Volkmann's ischemic contracture** **Treatment:** A turnbuckle splint/Max Page operation
3. **Volkmann's ischemia:** If this ischemia persists, it progresses to compartment syndrome.	3. **Myositis ossificans:** This is extraskeletal heterotrophic new bone formation around the joint. **Treatment:** Active and passive range of motion exercises.

Figure 41: Lateral condyle fracture

LATERAL CONDYLE FRACTURE

- Fracture of necessity
- If not fixed surgically → leads to complications of nonunion due to pull by common extension → leads to progressive cubitus valgus → leads to 'Tardy ulnar nerve palsy'.

Treatment

CR–IF/
OR–IF

Figure 42: Cubitus valgus

Milch Classification

- **Type I:** Fracture passes through capitellum (Salter-Harris type IV)
- **Type II:** Fracture passes around capitellum (Salter-Harris type II)—this is more common injury.
- If the fracture remains displaced, it will not unite and may lead to progressive cubitus valgus deformity, which can result to late involvement of ulnar nerve (Tardy ulnar nerve palsy)

FISH TAIL DEFORMITY

Figure 43: Fish tail deformity

It is seen at lower end of humerus with defects in Trochlea either when it is not developed or when necrosis occurs.

Clinical Aspect

Fracture of Necessity

1. Fracture lateral epicondyle of Humerus
2. Fracture Galeazzi
3. Fracture neck of femur

Other fractures of necessity with conditions

1. Fracture classical Monteggia
2. Lower 1/3 ulna
3. Intra-articular → displaced, e.g., BARTON'S
4. Fracture 2 parts patella [displaced]/2 part displaced olecranon
5. Lower 1/3 tibia

PART C—SPINE TRAUMA AND REGIONAL CONDITIONS

STRUCTURE OF VERTEBRA

Typical-Lumbar-Vertebra

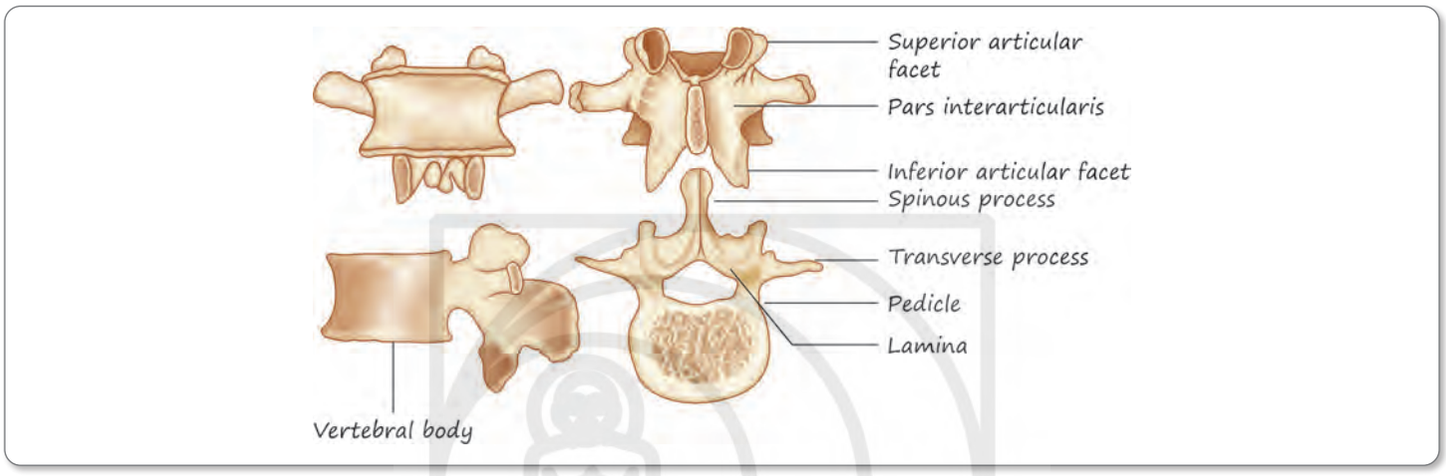


Figure 90: Normal parts of vertebra

Atlanto-occipital Joint and Atlanto-axial Joint

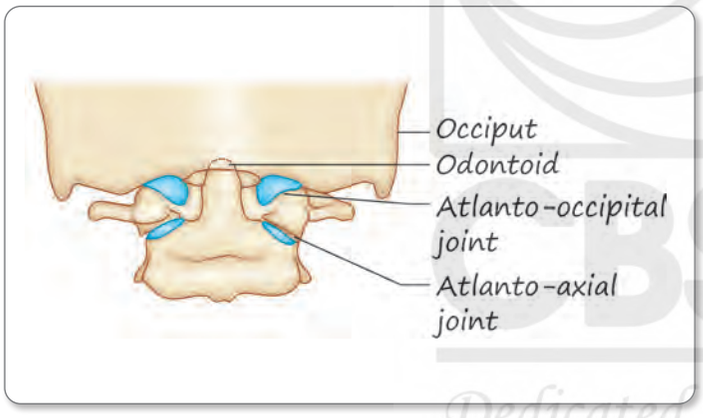


Figure 91: Atlanto-occipito joint (flexion-extension)

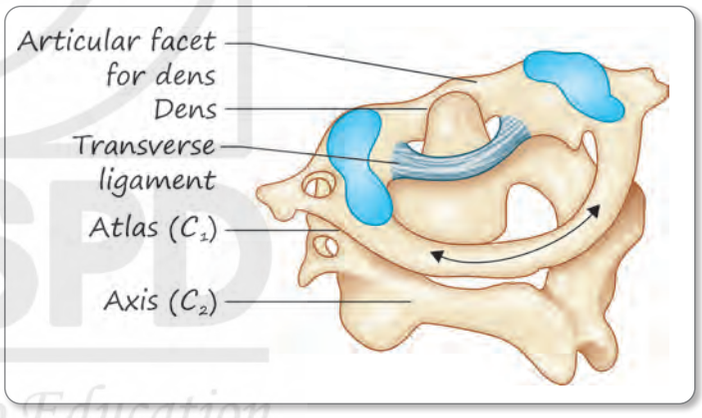


Figure 92: Atlanto-axial joint (rotation)

1. Jefferson's Fracture

- It is the most common type of atlas fracture (C1 vertebra).
- Diagnosis can be easily made on plain radiographs. The open-mouth (odontoid) view may show asymmetry of lateral masses of C1 on C2. CT provides the best details of the fracture.
- CT scan is the best diagnostic modality.

Treatment

- Undisplaced stable injuries are managed by semi-rigid cervical collar or halo vest until fracture unites.
- Unstable injury is managed by halo traction, halo vest immobilization for around 3–4 months.
- Surgical intervention may be needed in a few cases.

2. Hangman's Fracture

- Hangman's fracture is 2nd most common type of axis (C-2) fracture after odontoid fracture.
- The mechanism of injury is extension with distraction or it can also occur by hyper extension, axial compression and flexion force.

MANAGEMENT OF SPINAL INJURIES

Other Management Modalities

Sites of injury	Appliance used
Cervical spine	Crutchfield tongs/garden well tongs/Halo cast
Cervicothoracic spine	Minerva Cast
Thoracic spine	Taylor's brace/ASHE brace (Anterior spinal hyperextension brace)

Indications

Skull traction is achieved by gaining purchase on the outer table of the skull by metal pins.

Skull traction is mainly used in the management of serious injuries to the cervical spine to reduce a dislocation or fracture dislocation.

Crutchfield tongs may penetrate the inner table of the skull if they are tightened.

Skeletal traction applied to the skull can give rise to complications that can be fatal like osteomyelitis of the skull, extradural hematoma, extradural abscess, subdural abscess and cerebral abscess.

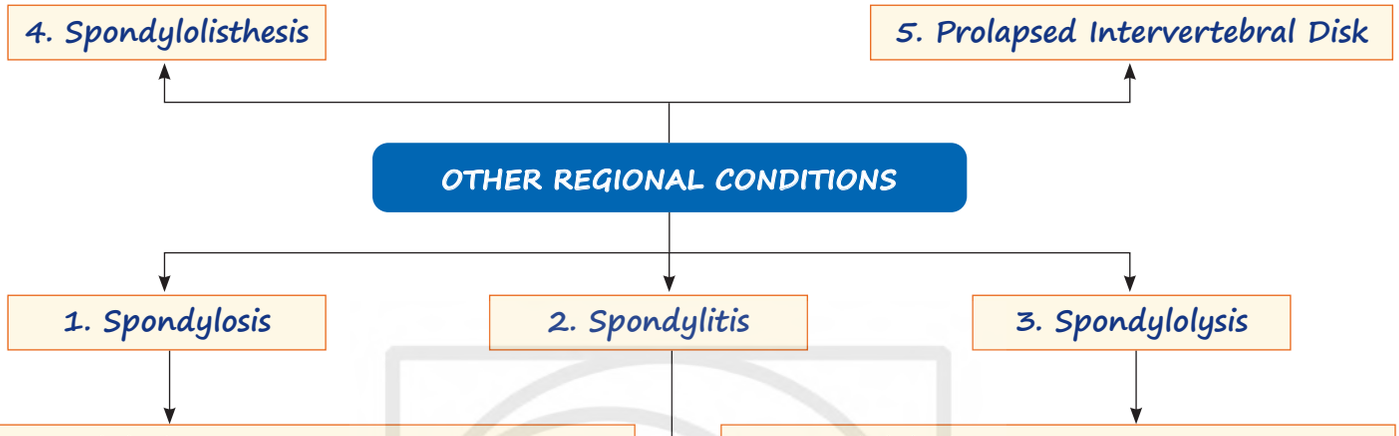
Crutchfield and Garden-Wells are used for cervical fracture and dislocation. Garden-Wells is more preferred. Both are applied to in parietal bone.

Figure 96: Crutchfield tongs

Figure 97: Minerva cast

Figure 98: Taylor's brace

OTHER REGIONAL CONDITIONS



1. Spondylosis

Spondylosis refers to degenerative change in the spine.

Figure 106: Spondylosis (degenerative change)

2. Spondylitis

Spondylitis refers to inflammatory changes in the spine.

Figure 107: Ankylosing spondylitis (bamboo spine) (inflammatory change) PYQ

3. Spondylolysis

- Spondylolysis is defined as a break at pars interarticularis.
- This can be present without any spondylolisthesis.
- Most often, there is a complaint of back pain and sometimes with leg pain as well.
- On examination, there is localized pain, most commonly in the midline at the lumbosacral junction.

Diagnosis

- X-ray oblique view is best to evaluate spondylolysis.
- Labeled as Scottish Terrier sign, which refers to break in neck of dog (at pars interarticularis). PYQ
- CT scan can give the best information.

Figure 108: Scottish Terrier

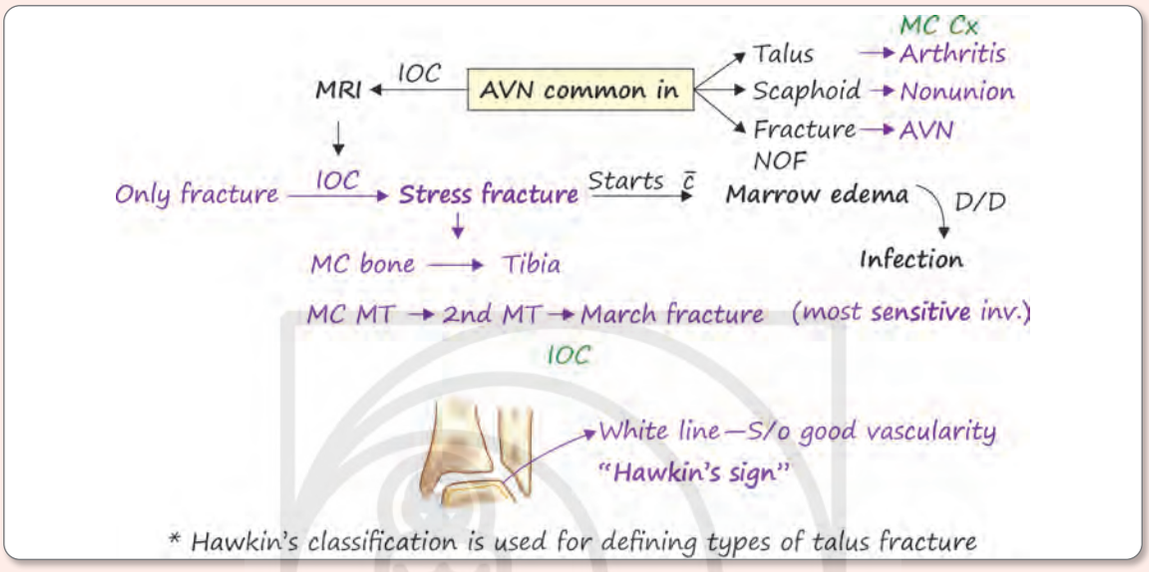
Treatment

Depending on complaints/symptoms of patient, it can be conservative or surgical fixation.

Contd...

Clinical Aspect

TALUS → Most common → Cx → Arthritis > AVN



FRACTURE CALCANEUM

Calcaneum is the most common tarsal bone to get fracture. It may be an undisplaced, or extra-articular and intra-articular fracture.

Clinical Features

- Swelling and severe tenderness over the heel can be elicited. There is inability to put weight on the heel. There may be associated injuries of vertebrae, femur, pubic rami or the atlantoaxial region.
- Standard X-rays done are AP, lateral and oblique view of the foot. Broden's view is done for posterior facet

Radiological Features of Fracture Calcaneus (On Lateral View)

- **Tuber angle of Bohler (tuber joint angle):** It is normally between 20°–40°.
- **Crucial angle of Gissane:** It is normally between 100°–120°
- CT scan is the investigation of choice.

Management

- Undisplaced (nondisplaced) fracture should be treated conservatively with a below-knee slab and cast
- Displaced fracture can be treated with open reduction and internal fixation.
- Open reduction and immediate arthrodesis may be needed in severely comminuted fracture.

Haglund's Deformity

Haglund's deformity is an abnormal projection on calcaneum. It is usually seen in association with Achilles tendinitis, which is due to excessive use of tendoachilles.

Retrocalcaneal bursitis is associated with this characteristic deformity.

Figure 175: Haglund's deformity

CLINICAL SNIPPET 9

MOST COMMON ROUTE OF SPREAD: HEMATOGENOUS

- **1. Bone**
  - **Osteomyelitis (OM)**
    - Most common site in bone
      - Metaphysis
    - Types
      - Acute OM
      - Subacute OM
      - Chronic OM
    - Most common organism
- **2. Joints**
  - Transient synovitis of hip
  - Septic arthritis
    - Most common joint involved—hip and knee joints

Refer to the next page

Condition/age group	Most common organism
All age groups	Staphylococcus aureus PYQ
Neonates	Streptococcus group B
Sickle cell anemia patient	Salmonella
Drug abusers and immunocompromised patient	Pseudomonas
Sexually active young adolescent	Neisseria gonorrhoeae
Animal bite	Pasteurella multocida
Human bite	Eikenella corrodens
HIV (immunocompromised)	Candida albicans
Chronically ill patients receiving long-term intravenous therapy or parenteral nutrition.	Fungal

PROGNOSTIC FACTORS OF POTT'S SPINE

Feature	Better prognosis	Poor prognosis
Degree of cord involvement	Partial (e.g., only sensory or motor)	Complete
Duration of cord involvement	Shorter	Longer >12 months
Speed of onset	Slow	Rapid
Age	Younger	Older
Type	Early onset	Late onset
General condition	Good	Poor
Vertebral disease	Active	Healed
Kyphotic deformity	<60°	>60°
Cord on MRI	Normal	Myelomalacia
Preoperative	Wet lesion	Dry lesion

TUBERCULOSIS OF JOINTS

Hip Joint

(For detail, refer to the next page)

Knee Joint

- In neglected cases due to the spasm and contracture of hamstrings particularly the biceps femoris, the leg is pulled into a deformity of flexion, posterolateral subluxation, external rotation and abduction.
- Once the flexion deformity is established, the tensor fasciae latae through iliotibial band further increases the deformity and this is known as a "**triple deformity of knee**".

Phalanges

Spina ventosa: It is TB dactylitis (TB of the phalanges)

Can show millet seed type of sequestrum

Figure 10: Spina ventosa TB dactylitis

Shoulder Joint

Caries sicca: It is dry TB of the shoulder. Dry as there is no exudate (Pus)

Figure 11: Carries sicca

10 Instruments and Implants

1. Screw driver

Figure 1

It is used to engage the screw head, for its fixation or removal from bone.

2. Bone gouge

Figure 2

This is a concave bladed instrument, which is used for cutting around cortical bones and scooping soft cancellous bone, which can be then used as a bone graft.

3. Plate bender

Figure 3

Figure 4

These are used to bend the plates (if needed) according to contour of bone.

4. T-Handle with key

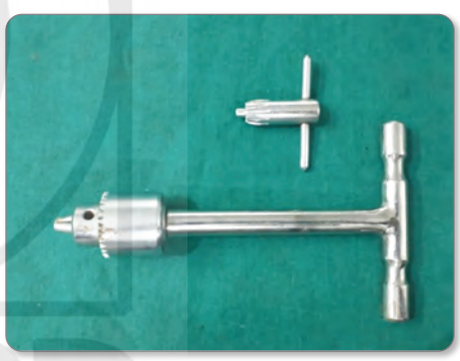


Figure 5

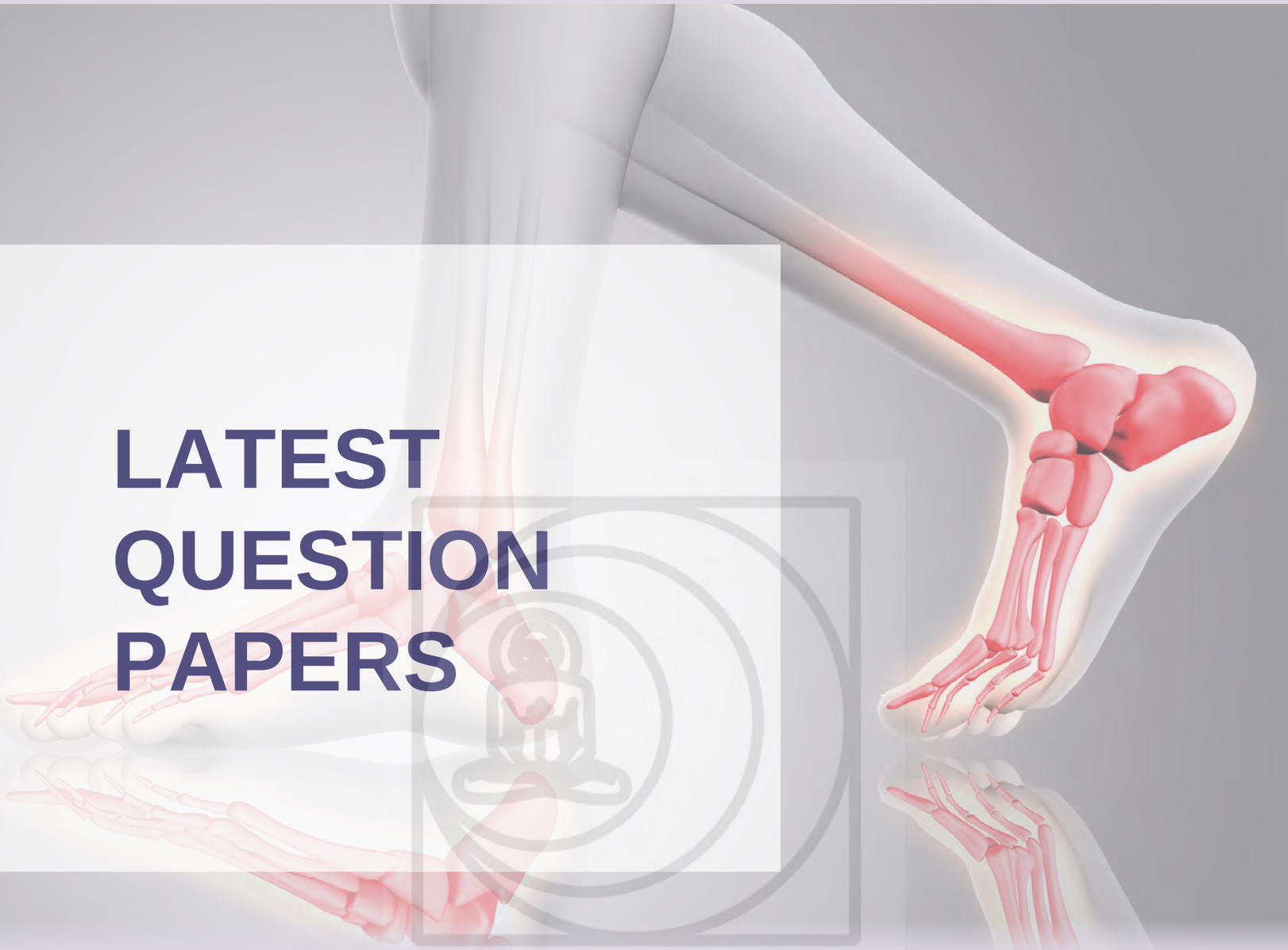
This is used as a manual drill for insertion of K-wires into bones.

5. Periosteum elevator PYQ

Figure 6

Figure 7

These are used to elevate the periosteum in orthopedic surgeries. The serrated part visible is used as a thumb rest.



LATEST QUESTION PAPERS

- → NEET PG 2024 (PART A) (MEMORY-BASED)
- → NEET PG 2024 (PART B) (MEMORY-BASED)
- → NEET PG 2023 (MEMORY-BASED)
- → NEET PG 2022 (MEMORY-BASED)
- → NEET PG 2021 (MEMORY-BASED)
- → INI-CET NOVEMBER 2024 (MEMORY-BASED)
- → INI-CET MAY 2024 (MEMORY-BASED)
- → INI-CET NOVEMBER 2023 (MEMORY-BASED)
- → INI-CET MAY 2023 (MEMORY-BASED)
- → INI-CET NOVEMBER 2022 (PART A) (MEMORY-BASED)
- → INI-CET NOVEMBER 2022 (PART B) (MEMORY-BASED)
- → INI-CET MAY 2022 (MEMORY-BASED)
- → INI-CET NOVEMBER 2021 (MEMORY-BASED)
- → INI-CET JULY 2021 (MEMORY-BASED)
- → FMGE JANUARY 2025 (MEMORY-BASED)
- → FMGE JULY 2024 (MEMORY-BASED)
- → FMGE JANUARY 2024 (MEMORY-BASED)
- → FMGE JULY 2023 (MEMORY-BASED)
- → FMGE JANUARY 2023 (MEMORY-BASED)
- → FMGE JUNE 2022 (MEMORY-BASED)
- → FMGE JANUARY 2022 (MEMORY-BASED)

NEET PG 2024 (PART A) (Memory-Based)

1. A patient met with road traffic accident and complained of severe backache. The X-ray is shown as follows. Which fracture does the patient have?

a. Chance fracture
b. Burst fracture
c. Compression fracture
d. Fracture of spinous process

Ans. a. Chance fracture

Explanation: **Chance fracture:**

- It is an unstable, flexion-distraction injury of the spine, often at the thoracolumbar junction.
- This creates a compression fracture of vertebra along with a transverse fracture through vertebral body, pedicle, spinous process.

2. An 8-year-old boy complains of fever and pain in the lower limb. There is a localized rise of temperature and the typical "onion-peel" radiographic appearance with tenderness in the midleg. ESR is raised. What is the most probable diagnosis?

a. Osteosarcoma
b. Ewing's sarcoma
c. Giant cell tumor
d. Osteomyelitis

Ans. b. Ewing's sarcoma

Explanation: Age of 8 years, involvement of midleg, onion-peel appearance favors Ewing sarcoma.

3. A child sustained an injury as shown in the following radiograph. What is the classification used and the grade used for this type of injury?

a. Salter-Harris classification-type III
b. Gartland classification-type II
c. Gartland classification-type III
d. Salter-Harris classification-type IV

Ans. c. Gartland classification-type III

Explanation: Fracture supracondylar humerus is differentiated by Gartland classification.

- Type I: Undisplaced fracture
- Type II: Partially displaced fracture
- Type III: Displaced fracture
- Type IV: Unstable fractures

4. A patient sustained a fracture of the base of the fifth metatarsal in the right foot. He was advised below-knee POP cast. How long should the cast be put?

a. 6–8 weeks
b. 2–3 weeks
c. 3–5 weeks
d. 16–20 weeks

117. A 6-year-old girl presented to an emergency department with elbow pain. There is swelling in the elbow and hand, and she cannot move the elbow due to pain, and is having numbness in the fingers/hand. Her pulse is also feeble. An X-ray was performed. Identify the vessel in danger.

a. Ulnar nerve
b. Brachial artery
c. Axillary artery
d. Radial artery

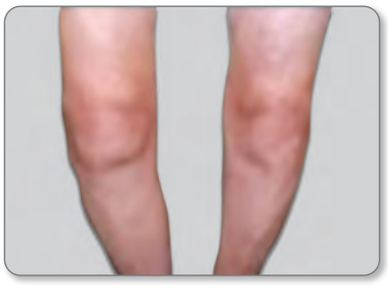
Ans. b. Brachial artery

118. A 5-year-old child presents in your OPD with genu varum on X-ray, osteopenia and pseudofractures can be noticed. On blood investigations, there is decreased vitamin D and increased ALP. What is the most probable diagnosis?

a. Osteomalacia
b. Osteopetrosis
c. Osteitis deformans
d. Osteoporosis

Ans. a. Osteomalacia

119. A 70-year-old female presented to OPD with pain in her right knee. The knee is swollen as well. The clinical image of the case is shown. Identify the disease.



a. Paget's disease of bone
b. Osteoarthritis knees
c. Rheumatoid arthritis
d. Gouty arthritis

Ans. b. Osteoarthritis knees

120. A 20-year-old male with pain lateral side of his hand. An X-ray was performed. Identify the disease.

a. Giant cell tumor
b. Osteoid osteoma
c. Osteoblastoma
d. Enchondroma

Ans. d. Enchondroma

FMGE JUNE 2022 (Memory-Based)

121. A patient falls on an out-stretch hand. For management, the doctor ties a cast as given in the image. Which fracture and the patient suffer from?

a. Colles' fracture
b. Smith fracture
c. Scaphoid fracture
d. Galeazzi fracture

Ans. c. Scaphoid fracture

122. What is the treatment for this fracture?

a. Total patellectomy
b. K- wire
c. Conservative treatment
d. Tension band wiring

Ans. d. Tension band wiring

123. A patient comes to the OPD with pain and swelling in his wrist. The X-ray is given here. What could be the diagnosis?

a. Osteosarcoma
b. Giant cell tumor
c. Chondroblastoma
d. Aneurysmal bone cyst

Ans. b. Giant cell tumor

124. A 2-year-old baby is presented to the OPD by his worried parent with the following complaint. How would you manage the patient?

a. Manipulation and cast
b. Posteromedial soft tissue
c. Triple Arthrodesis
d. Evans procedure

Ans. a. Manipulation and cast

125. A patient comes to the OPD with the chief complaint of pain and swelling in the right shoulder. A fracture of the clavicle is suspected. Which is the most common site of fracture in the clavicle?

a. Lateral 1/3rd
b. Junction of lateral 1/3rd and medical 2/3rd
c. Junction of medial 1/3rd and lateral 2/3rd
d. Medial 1/3rd

Ans. b. Junction of lateral 1/3rd and medical 2/3rd

FMGE JANUARY 2022 (Memory-Based)

126. A 34-year-old male presents with a history of progressive lower backache and early morning stiffness for the past 6 months. His symptoms are more severe in the morning and improve on exercise. He is a known case of ulcerative colitis. An X-ray of his lumbar spine is taken and is given here. What is the most likely diagnosis?

a. Pott's spine
b. Psoriasis arthritis
c. Ankylosing spondylitis
d. Rheumatoid arthritis

Ans. c. Ankylosing spondylitis

ONE Touch Orthopedics

For NEET PG/NEXT/FMGE/INI-CET

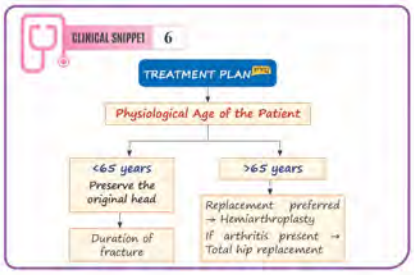
Theory—A concise form of text covered in just 250 pages. Most important points to remember have been given for the last-minute revision. Text of entire book has been presented in the form of Tables, Boxes, Flowcharts, and Illustrations for easy recalling.

Mnemonic: SEAMCLR

Sarcomas metastasizing through lymphatic and causing lymph node involvement are:

- *S – Synovial cell sarcoma*
- *E – Epithelial sarcoma*
- *A – Angiosarcoma*
- *M – Malignant fibrous histiocytoma*
- *C – Clear cell sarcoma*
- *L – Lymphosarcoma*
- *R – Rhabdomyosarcoma*

Mnemonic—The text has been supplemented with easy to recall Mnemonic boxes for quick memorization of the concepts.



Clinical Snippet—Clinical Snippets have been integrated with the topics to enhance understanding of clinical correlations and facts.

Important One-Liners

- *Neuroblastoma (adrenal), osteosarcoma and Ewing's sarcoma are pediatric malignancies commonly metastasizing to bone.*
- *Sarcomas of soft tissue origin do not frequently involve bone.*
- *Rhabdomyosarcoma is the most common soft tissue tumor in child.*
- *Malignant fibrous histiocytoma is the most common soft tissue tumor in adult.*

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About the Author

Sushil Vijay, *MBBS, D. Ortho,* is a leading orthopedic surgeon based in New Delhi with over 11 years of teaching experience. He is an orthopedics faculty at DBMCI and DBMCI ONE, mentoring FMGE and PG aspirants through SSS sessions. Trained in Trauma (AIIMS), Joint Replacement (Germany), Ilizarov, Spine, and Rheumatology, he currently practices and is part of a global group promoting conservative orthopedic care. He also runs an NGO, SS Foundation, supporting education for underprivileged children, and has authored several key titles including *Comprehensive Review of Orthopaedics* and *Textbook of Orthopaedics* for University exams, PGMEE and FMGE.

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