



SNS COLLEGE OF ALLIED HEALTH SCIENCES

SNS Kalvi nagar, coimbatore -35
Affiliated To Dr MGR Medical university

DEPARTMENT: PHYSICIAN ASSISTANT

COURSE NAME: ORTHOPAEDICS

UNIT: THIRD UNIT

TOPIC: FRACTURE





DEFINITION:

A break in continuity of bones is called fracture. It may be due to excessive pressure on bone and bone is unable to absorb this pressure



CAUSES OF FRACTURE









TYPES:

- 1. Complete fracture
- 2. Incomplete fracture
- 3. Comminuted fracture
- 4. Open fracture
- 5. Closed fracture
- 6. Impacted fracture
- 7. Pathologic fracture





- Complete fracture
 It involves the entire section of the bone
- 1. Incomplete fracture
 Also called greenstick fracture break
 occurs only through part of crass section of
 the bone.
- Open fracture
 It is also called compound or complex fractured bone





- 4. Comminuted fracture
 - A break with several bone fragments
- 5. Impacted fracture When one bone impact to another bone.
- 6. Pathologic fracture
 Fracture occurs due to bone disease or
 without any other pressure





7. Closed fracture It is also called simple fracture, it does not produce a bone impact to another bone



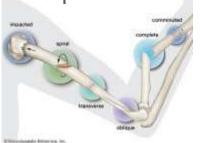


Incomplete fracture





Complete fracture



Pathologic fracture





Comminuted fracture



Impacted fracture







CLINICAL MANIFESTATIONS:

- 1. Swllelling
- 2. Localized edema
- 3. Numbness
- 4. Tenderness
- 5. Injured muscle, blood vessels, nerves
- 6. Acute pain
- 7. Loss of function





- 8. Crepitus
- 9. If open fracture, there may be enhance of haemorrhage that leads to shock
- 10. Shorting of extremity
- 11. Deformity





PATTERNS OF FRACTURE:

- **1.Greenstick fracture -** one side of the bone is broken and the other side Is bent.
- 2. Oblique fracture at an angle across the bone.
- 3. Transfer fracture- straight across the bone.
- 4. Spinal fracture- twist around the soft of bone.
- 5. Compression fracture- bone collapse on itself.





DIAGNOSIS:

- 1. History collection
- 2. Physical examination
- 3. X-ray Anterior view, lateral view and posterior view
- 4. CT Scan
- 5. MRI Scan





MANAGEMENT:

EMERGENCY MANAGEMENT:

- 1. Check abc of patient and also maintain it
- 2. Check vital sign
- 3. Immediately after injury immoblize the body part while the patient have to move.
- 4. Slipnt the fracture
- 5. To support the fracture site
- 6. In an upper extremely injury the arm maybe





Bandaged to be chest or an injured for home maybe placed In a siting

7. Cover the wound of an open fracture with a sterile dressing to prevent contamination of deeper tissues





PROCEDURE:

It is of 3 types

- 1. Close the reduction: it is a method of fracture realigament. address performed manually apply fraction force to bone till end of the bone together.
- 2. Open reduction: surgical placement of internal fixtion devices
- 3. Traction reduction: the application of a pulling force, especially as a means of counteracting the nature tension in the tissues, surrounding air broken bone.





TWO DIRECTION:

1. PULL OF TRACTION

Traction is the application of a pulling force to an injured part of the body or extremity.

2. PULL OF COUNTER OF TRACTION

Counter traction is the force acting in the opposite direction to the applied traction





ASSESSMENT

- 1. WHAT IS FRACTURE?
- 2. PATTRNS OF FRACTURE

REFERENCE

WWW.autorstream.com WWW.slidehare.com





THANK YOU