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ҚАЗАҚ ҰЛТТЫҚ МЕДИЦИНА
УНИВЕРСИТЕТІ



КАЗАХСКИЙ НАЦИОНАЛЬНЫЙ
МЕДИЦИНСКИЙ УНИВЕРСИТЕТ
ИМЕНИ С.Д.АСФЕНДИЯРОВА

КАФЕДРА ИНОСТРАННОГО ЯЗЫКА

Independent work

Fractures

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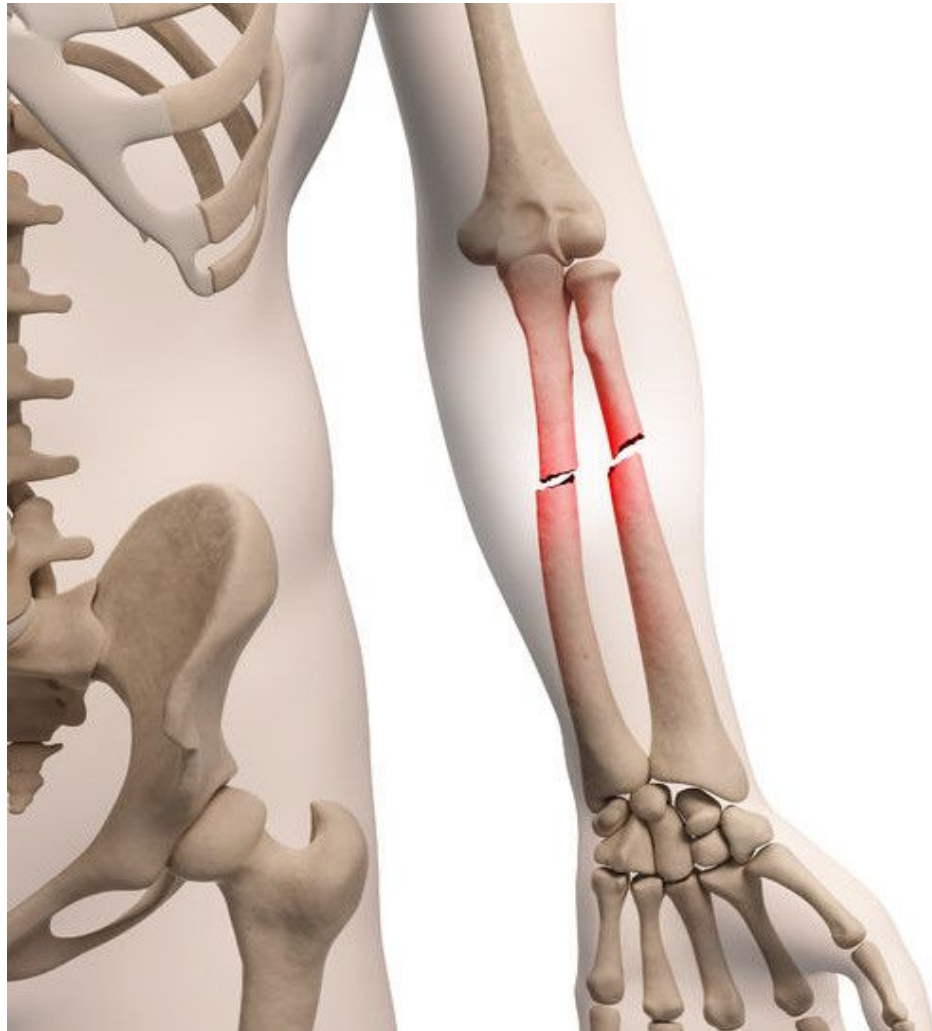
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Plan

- Definition
- Causes of fracture
- Classification of Fractures
- Symptoms of fractures
- Diagnosis of fractures
- Literature

Definition

A fracture
- is a
partial or
complete
break in
the bone.



Causes

- For reasons of occurrence of fractures are traumatic and pathological.

Traumatic result from the strong load and **pathological** - due to the presence of a pathological factor which is in the bone tissue.

The most common causes of fractures include:

- strong physical exertion;
- previously borne diseases;
- weakened bone tissue;
- osteoporosis.

Classification

Traumatic fractures occur from

- bending
- shear
- compression
- due to separation

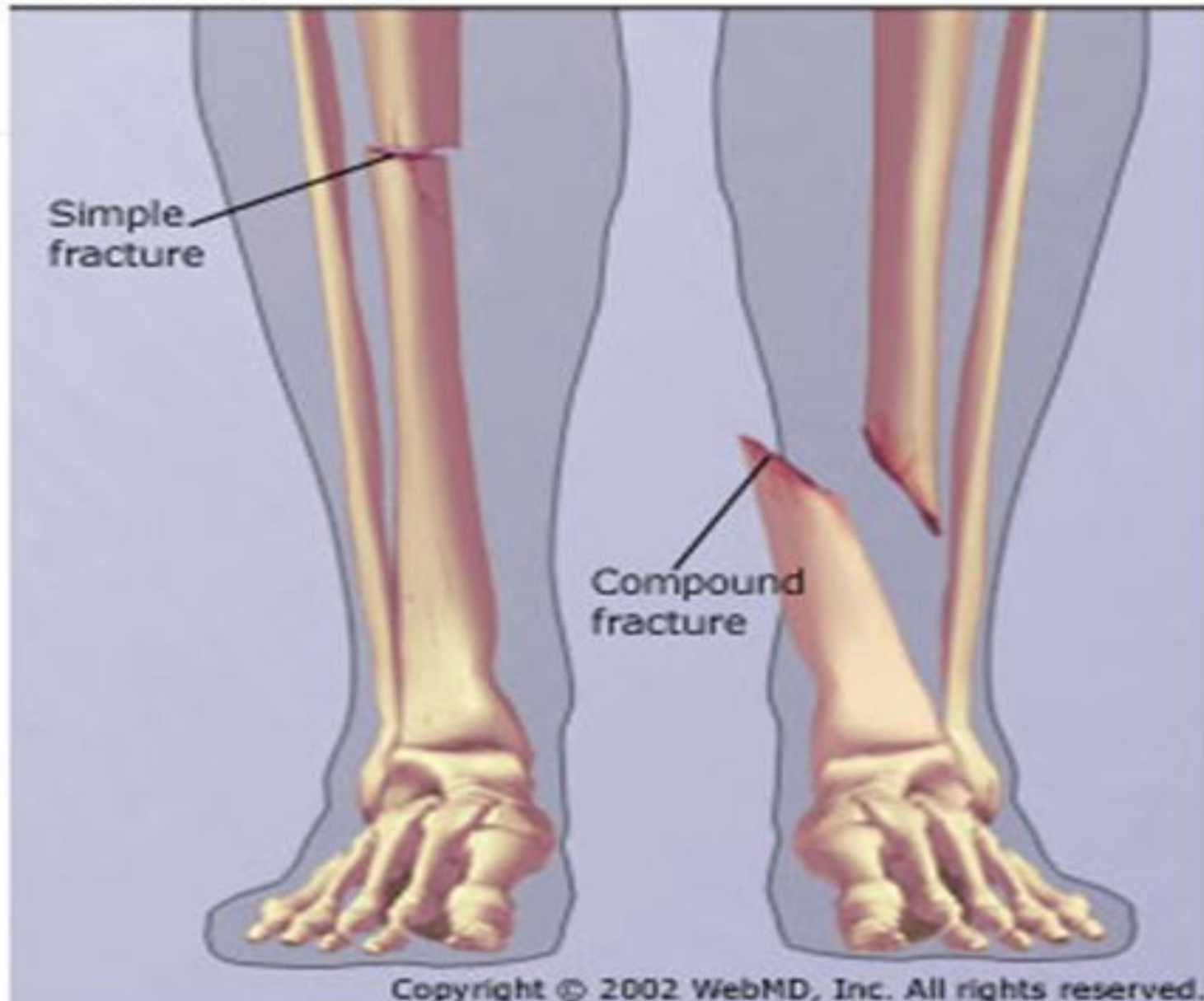
I. Closed and open fractures:

1) closed (simple fracture)-the bone is broken but the skin is still

intact;

2) open (compound fracture)-occurs when the broken bone breaks through the skin.

Bone Fractures



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II. Intra-articular and extra-articular:

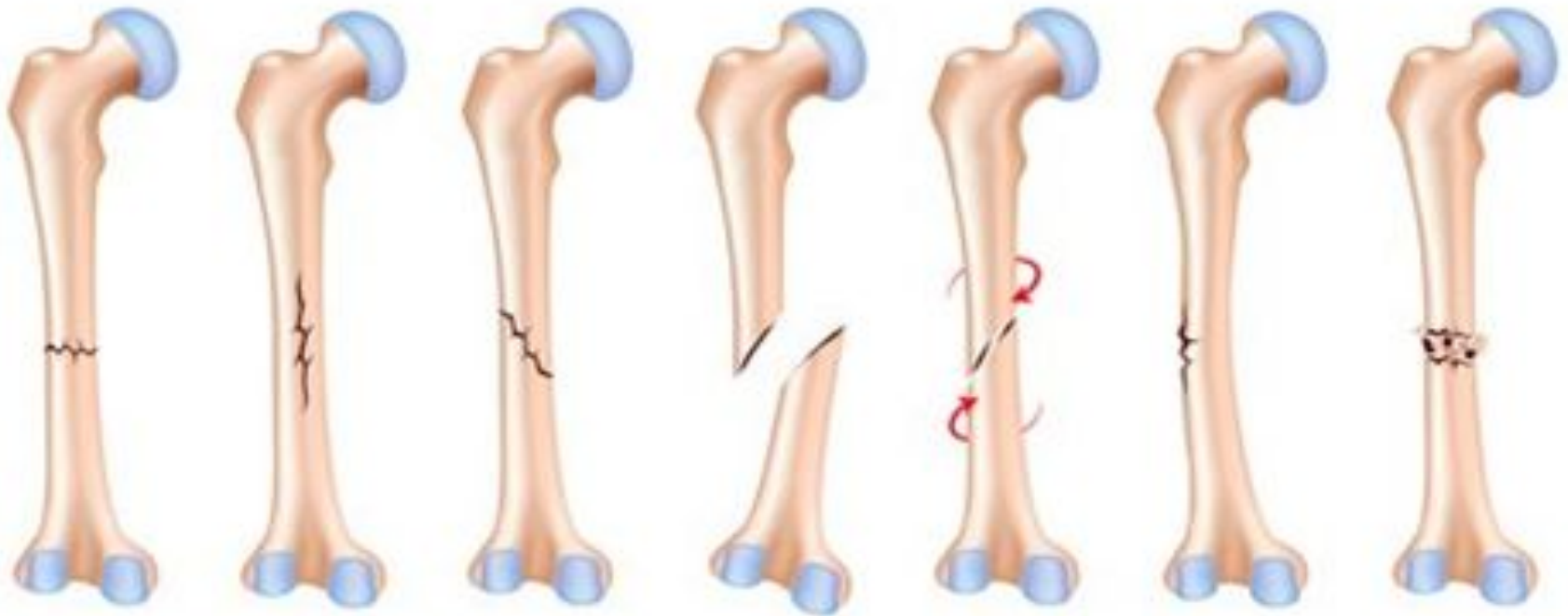
- 1) intra;
- 2) extraarticular:
 - a) epiphyseal;
 - b) metaphyseal;
 - c) diaphyseal.

III. Types of fractures :

- 1) simple - to form two bone fragments ;
- 2) the comminuted - to form three or more bone fragments ;
- 3) multiple - a bone fracture in two or more places .

● IV.

Types of Bone Fractures



Transverse

Linear

Oblique,
nondisplaced

Oblique,
displaced

Spiral

Greenstick

Comminuted

- **Transverse fracture** - a straight break across a bone.
- **Linear fracture** - the break is along the length of the bone.
- **Oblique fracture** - A fracture that is diagonal to a bone's long axis.
- **Spiral fracture** - A fracture where at least one part of the bone has been twisted.
- **Greenstick fracture** - the bone partly fractures on one side, but does not break completely because the rest of the bone can bend. More common among children, whose bones are softer and more elastic.
- **Comminuted fracture** - the bone is shattered into many pieces

Symptoms of fractures

- pain
- deformation
- swelling
- abnormal mobility
- crepitus of bone fra
- dysfunction.



Diagnosis of fractures

To diagnose bone fractures used methods of clinical and instrumental examination.

- *The former include:* examination of the patient, palpation (feeling), sometimes percussion (tapping), the definition of the functions of the damaged segment.
- *Instrumental methods* for the diagnosis of bone fractures is pe



Treatment of fracture

Non-operational treatment of fracture

- Imposing cast.
- Skeletal traction - a method of treatment of fractures of the shin bone, reed, shoulder, cervical vertebrae.

Operative treatment of fractures

- Internal fixation with the use of metal structures.
- External fixation using a special apparatus (apparatus Ilizarov ring based supports), which ensure a stable fixation.

Drug therapy

- Analgesics
- Antibiotic therapy
- Vitamin and mineral supplements
- Preparations-chondroprotectors

Literature

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