



# Surgical treatment fractures of proximal humerus in children



# Injuries in childhood

- The most common cases of injuries:
  - Morbidity
  - Lasting effects (persitent disorders)
  - Mortality

# The most common cases of injuries in childhood:

- Sports injuries
- Schools injuries
- Traffic injuries
- Others

(burns injuries, suicide, criminal offenses-stab and gunshot wounds, abuse, rape atd.)

# Diagnostics:

- Anamnesis (personal history or case history)
- Clinical examination
- X-ray of skeleton
- USG
- CT, possibly NMR
- Laboratory examination



# Reduction of fractures

- fine and sparing
- reduction maneuvers as inverse action  
unjuries story
- fixation (plaster fixation) in the held the  
position
- analgesia, but better general anesthesia

# Requirements for internal fixation in children

- Minimally operating load
- Protection growth plate
- Minimally traumatization soft tissues
- Dynamic stability of fragments
- Minimalization risk of infection
- Respect of vascular supply of bone
- Early rehabilitation
- Possibility of nursing care

# Set of patient in the year 2006 - 2010

- In the years 2006 – 2010 were primarily
- treated **7900** patient in the age 0-18 years
- For sceletal injury hospitalized **849** patients
- With fracture of humerus **215** patients



# Set of patient in the year 2006 - 2010

- With fracture of humerus **215** patients
- With fracture of **proximal** humerus : 32
- In the age of 8-18 let
- Rate male – female 13:19



# Indication criteria

- Dislocation and angulation greater than 20 degrees
- In polytrauma and multiskeletal fractures (in the impossibility conservative treatment)
- In the case injury of neurovascular injury

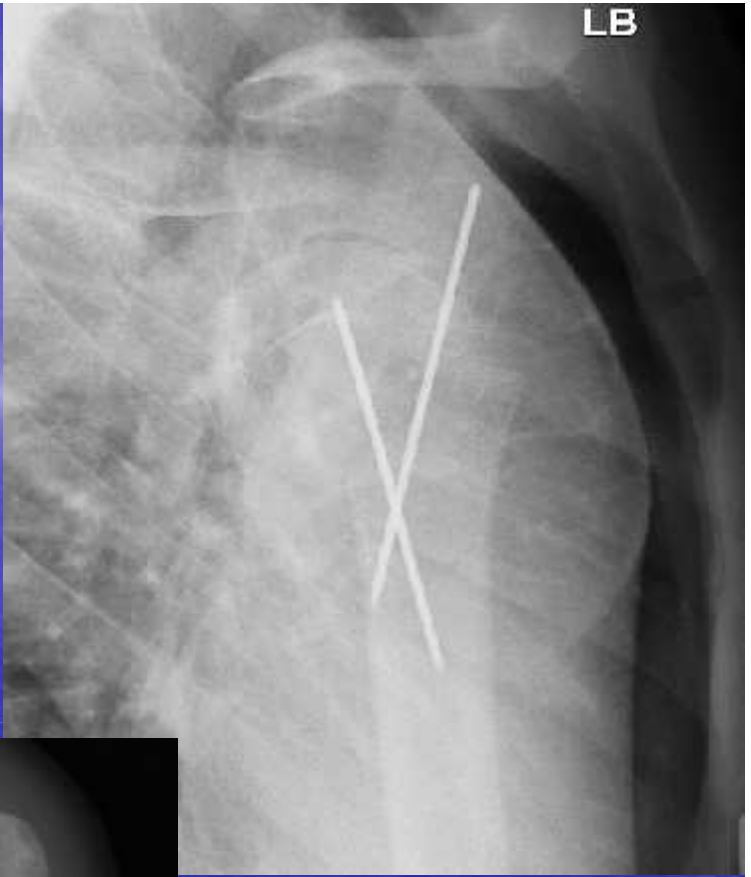








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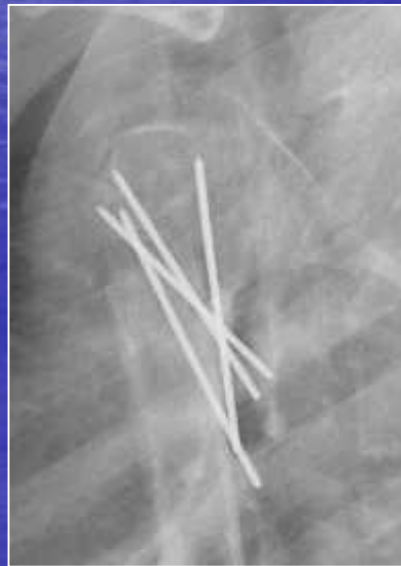
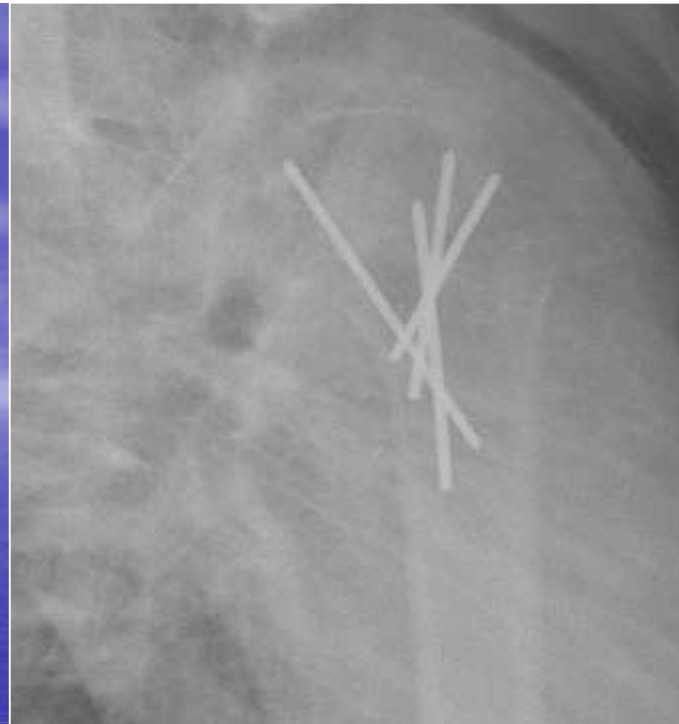
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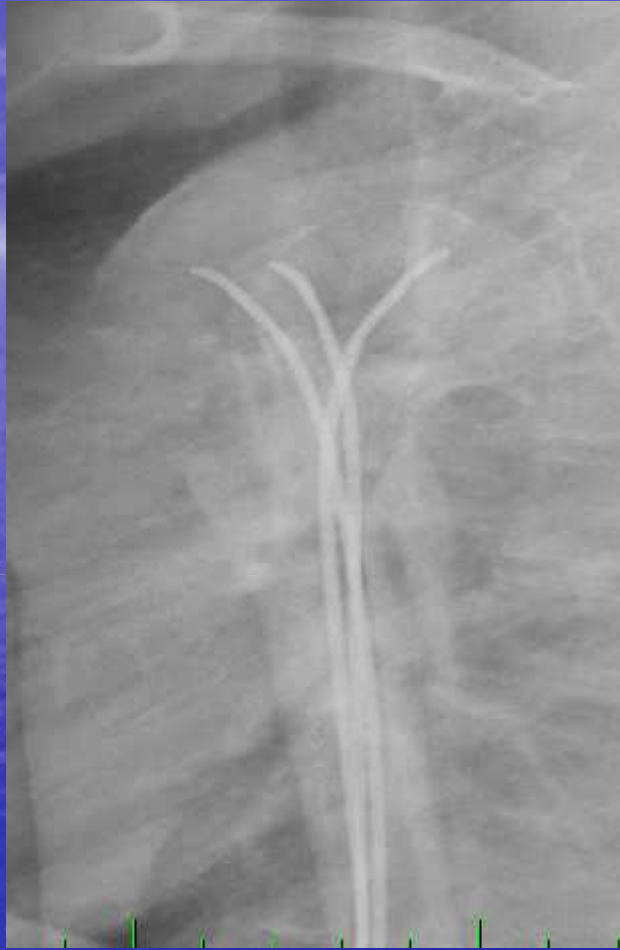


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# Physical therapy

- Early movement prevents muscle atrophy, joints contractures, accelerates physiological healing
- Rehabilitation must be proportional to the patient's condition and healing of bone

# Conclusions

- Surgical treatment is better than conservative treatment, because it has faster healing, early rehabilitation, and doesn't require rigid fixation.
- Parents want to have children at home as soon as possible.

**Děkuji za pozornost**

