Surgical treatment of fractures of proximal humerus in children

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Injuries in childhood

- The most common cases of injuries:
  - Morbidity
  - Lasting effects (persistent 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 and others.)
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
- 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 skeletal 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 years
- Rate male – female 13:19
Indication criteria

- Dislocation and angulation greater than 20 degrees
- In polytrama and multiskeletal fractures (in the impossibility conservative treatment)
- In the case injury of neurovascular injury
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 their children at home as soon as possible.
Děkuji za pozornost