Glenoid fractures

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prevalence

Scapular fx: 1% of all fracture
(5% of all shoulder fractures)
Glenoid fx: 10% of scapular fx

- High energy trauma
- High incidence of associated osseous and soft tissue injuries
Goss-Ideberg classification for fractures of the glenoid cavity

- **Type I** → fractures involve the glenoid rim
Goss-Ideberg classification for fractures of the glenoid cavity

- types II ➔ Inf. segment
Goss-Ideberg classification for fractures of the glenoid cavity

- types III $\rightarrow$ Sup. segment
Goss-Ideberg classification for fractures of the glenoid cavity

- types IV  ➔ fracture courses transversely across the entire scapula
Goss-Ideberg classification for fractures of the glenoid cavity

- Type V → combinations of the types II, III, and IV injuries
Goss-Ideberg classification for fractures of the glenoid cavity

- Type VI → comminuted fx of fossa
Diagnosis

- X-ray
- CT
Indications for surgery

- Glenoid rim
  - $>1/4 \text{ anterior glenoid cavity}$
  - $>1/3 \text{ posterior glenoid cavity}$
- Glenoid cavity
  - Articular step-off $> 5\text{-}10 \text{ mm}$
  - Significant separation of fragments
  - Failure of humeral head to remain centered
Surgical Approaches

- Anterior - Type Ia
- Posterior - Types Ib, II, Va
- Posterosuperior - Types III, IV, Vb, Vc
Anterior surgical approach to the glenoid cavity
Posterior approach
Posterior approach
Posterior approach
Methods for fixation
26 y. male with old glenoid fx
24 y. old male
Arthroscopic-assisted surgery for Glenoid fx

38 y. old man with glenoid fx
Summary

- Uncommon fracture
- Challenging and complex fractures
- Needs good judgment and experience
- Arthroscopy-assisted a future era for fixation

Thank you for attention