

Osteochondritis Dessicans

In adolescent in Pitchers due to lateral compression injury

Pain over antero-lateral aspect of the joint

Flattening and irregularity of capitellum

Loose body poor prognostic sign

Rx: Excision of loose body,

Drilling

1. Panner's osteochondrosis

AVN of whole capitellum.

4-6 years of age

Rx: good recovery with Non operative



2. Osteochondritis Dessicans

2-26 yrs.

Common overuse (Pitchers)

Younger patients do well with non-op management.

Treatment: Debridement of loose bodies, crater should be curetted and drilled with a Kirschner wire to stimulate vascular in-growth.

Degenerative changes and limitations of motion are to be expected in these patients.



Heterotopic Ossification

Occurs following:

1. Injury to the elbow
 - In fracture dislocation ++++
 - Simple dislocation ++
 - Fracture +
2. More common with closed head injury
3. Forceful MUA of elbow: multiple attempts
4. Oil massage following injury as in developing countries



Surgical delay and ossification: This has a risk factor for ossification is not proved.

Presentation:

Usually appears 4-6 weeks following injury

Bone scan may take 2 years to be normal;

CT can define anatomic plane is an important pre-operative investigation

Excise only when it is mature and only when there is functional deficit

Hasting classification:

- I Asymptomatic [no functional limitation]
- II Subtotal limitation: Limitation in Flexion and extension
 - Rotation
 - Both
- III Complete ankylosis

Evaluation

1. Evaluate HO with serial X ray. X ray maturity is defined as ability to identify sharp cortical margins with trabeculation may take about 3-5 months

2. Alkaline phosphatase and bone scan is not very useful

Treatment:

1. Asymptomatic: leave it along
2. When needed earlier excision ie at 5 months is better than waiting for 18 months. This prevents secondary changes
3. Prevention: Diphosphonates, Indomethacin
or Post operative radiation [1000 cGy divided over 5 doses
delivered within 48 hrs of surgery]

Surgical approach

1. Posterior Heterotopic ossifications
Posterior approach
Elevated Triceps
In some HO can encase ulnar nerve
2. Anterior Heterotopic ossifications: Can follow Biceps or Brachialis or capsule
Antero - Medial and lateral approach or combined

Principles:

- I. Resect ossifications and Capsulotomy : obtains full ROM.
- II. In long standing cases: it is necessary to clear Coronoid, radial & olecranon fossa
- III. Patient with ulnar nerve irritation: Ulnar nerve transposition is indicated.
- IV. Continuous passive mobilization and NSAID or X ray therapy indicated