Capitatum Fractures
Lesional Aspects

About 23 cases

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No conflict of interest
Study of 23 cases
Observational
Retrospective
Inclusion of capitatum fractures or pseudarthrosis in adults

Tours CHU database

MAY THE LESIONAL MECHANISM DETERMINE THE FRACTURE LOCATION AND THE POSSIBLE ASSOCIATED INJURIES?
Data collection

- About the cases:
  - 23 patients included during 27 years
  - Mean follow-up: 11 months
  - Mean age: 31 years

- About the trauma, 3 mechanisms:
  - Direct by compression
  - Indirect by axial impaction
  - Indirect by torsion

- About fracture or pseudarthrosis of the capitatum:
  - Location and displacement
  - Associated lesions
Results

- 13 displaced fractures including 7 dislocations
- 3 isolated capitate fractures
- Fracture location: 7 neck / 8 body / 8 base
- Mechanism:
  - 7 torsions
  - 6 direct compressions
  - 10 axial impactions

<table>
<thead>
<tr>
<th>Pain</th>
<th>Ædema</th>
<th>Pain</th>
<th>Disability</th>
<th>Loss of strenght</th>
<th>Pain</th>
<th>Paresthésia</th>
</tr>
</thead>
<tbody>
<tr>
<td>J0-35</td>
<td>17 cas</td>
<td>J60-90</td>
<td>4 cas</td>
<td>J538-6434</td>
<td>2 cas</td>
<td></td>
</tr>
</tbody>
</table>
Fracture of proximal third

- n = 7
- 4 delayed diagnosis
- Indirect violent traumatism by torsion
- 6 displaced

Associated lesions:
- 4 scaphoïd fractures / 1 perilunar dislocation
- 6 luno-triquetral / 5 scapho-lunate injuries
Fracture of middle third

- n = 8
- 4 delayed diagnosis
- Traumatism:
  - Direct trauma: 6
  - Impaction: 2
- No displacement
- No ligamentous injury
- 3 isolated cases
Fracture of distal third

- n = 8
- Traumatism by axial impaction
- Associated fractures (hamatum, metacarpal) with 5 carpo-metacarpal dislocation
- No SL or LT lesions
Conclusion

OPTIMIZATION OF DIAGNOSTIC PROCESS

Capitate fracture

- Proximal third
  - TL or SL lesion
  - LPLC
  - Fenton sd
  - Indirect trauma by torsion

- Middle third
  - Isolated
  - Direct dorsal trauma

- Distal third
  - Fracture dislocation CMC
  - Indirect trauma by impaction