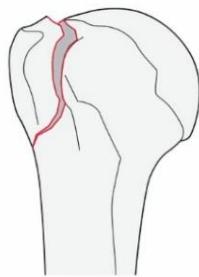


Humerus proximal end segment (11)

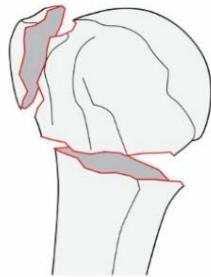
- Added Neer classification
- Defined C to greater extent

Types:

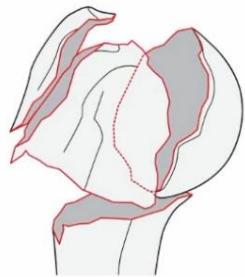
Humerus, proximal end segment,
extraarticular, unifocal, 2-part fracture
11A



Humerus, proximal end segment,
extraarticular, bifocal, 3-part fracture
11B



Humerus, proximal end segment,
articular or 4-part fracture
11C



Extraarticular—Type A: The fracture line may be metaphyseal or epiphyseal, but it always spares the articular surface although it may be intracapsular.

Partial articular—Type B: The fracture involves part of the articular surface while the remainder of the joint remains intact and is solidly connected to the supporting metaphysis and diaphysis.

Complete articular—Type C: There is a disruption of the articular surface and the articular surface is completely separated from the diaphysis.

Universal modifiers list

- | | |
|--|---|
| 1 Nondisplaced | 8 Articular cartilage injury* |
| 2 Displaced | 8a ICRS Grade 0 |
| 3 Impaction | 8b ICRS Grade 1 |
| 3a Articular | 8c ICRS Grade 2 |
| 3b Metaphyseal | 8d ICRS Grade 3 |
| 4 No impaction | |
| 5 Dislocation | 8e ICRS Grade 4 |
| 5a Anterior (volar, palmar, plantar) | |
| 5b Posterior (dorsal) | |
| 5c Medial (ulnar) | 9 Poor bone quality |
| 5d Lateral (radial) | |
| 5e Inferior (with hip is also obturator) | 10 Replantation |
| 5f Multidirectional | |
| 6 Subluxation/ligamentous instability | 11 Amputation associated with a fracture |
| 6a Anterior (volar, palmar, plantar) | 12 Associated with a nonarthroplasty implant |
| 6b Posterior (dorsal) | |
| 6c Medial (ulnar) | 13 Spiral type fracture |
| 6d Lateral (radial) | |
| 6e Inferior (with hip is also obturator) | 14 Bending type fracture |
| 6f Multidirectional | |
| 7 Diaphyseal extension | |



Universal modifiers—example

- A 3-part bifocal proximal humerus fracture dislocation with displacement, anterior dislocation, and osteopenia = 11B1.1 [2,5a,9]



Qualifications—example

Humerus, proximal end segment, articular or 4-part fracture, valgus impacted 11C1.1

To indicate both tuberosities are fractured add qualification: **for both tuberosities = (p)**

Final code:
Humerus, proximal end segment, articular or 4-part fracture, valgus impacted and both tuberosities fractured = **11C1.1(p)**



Combining qualifications and universal modifiers—example

Humerus, proximal end segment, articular or 4-part fracture, valgus impacted and both tuberosities fractured 11C1.1(p)

To add anterior dislocation use the universal modifier:
with an anterior dislocation = [5a]

Final code:

Humerus, proximal end segment, articular or 4-part fracture, valgus impacted and both tuberosities fractured = **11C1.1(p)[5a]**

Sequential gaps in alphanumeric code

- Codes reviewed for usage and accuracy
- Some removed because they were better described using new standardized terminology or by using the universal modifiers
- This creates gaps in the layout of the compendium

Type: Humerus, proximal end segment, **articular or 4-part fracture** 11C

Group: Humerus, proximal end segment, articular or 4-part, **anatomical neck fracture** 11C1

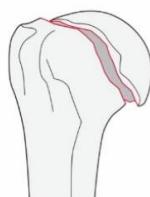
Subgroups:
Valgus impacted fracture
11C1.1*



*Qualifications:
n Greater tuberosity
o Lesser tuberosity
p Both tuberosities

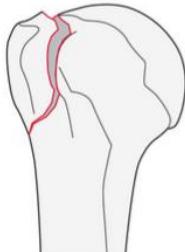
34

Isolated anatomical neck fracture
11C1.3

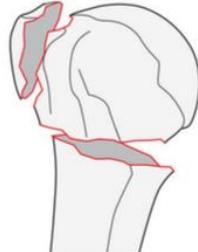


Types:

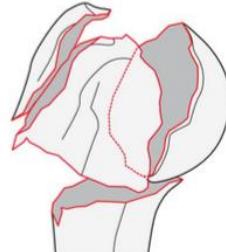
Humerus, proximal end segment,
extraarticular, unifocal, 2-part fracture
11A



Humerus, proximal end segment,
extraarticular, bifocal, 3-part fracture
11B



Humerus, proximal end segment,
articular or 4-part fracture
11C



11A

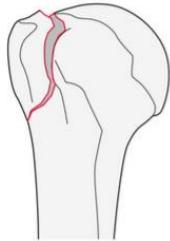
Type: Humerus, proximal end segment, **extraarticular, unifocal, 2-part fracture** 11A

Group: Humerus, proximal end segment, extraarticular, unifocal, 2-part, **tuberosity fracture** 11A1

Subgroups:

Greater tuberosity fracture

11A1.1



Lesser tuberosity fracture

11A1.2

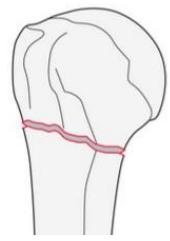


Group: Humerus, proximal end segment, extraarticular, unifocal, 2-part, **surgical neck fracture** 11A2

Subgroups:

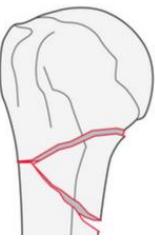
Simple fracture

11A2.1



Wedge fracture

11A2.2

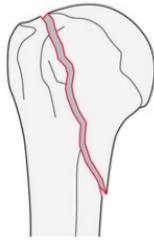


Multifragmentary fracture

11A2.3



Group: Humerus, proximal end segment, unifocal, 2-part, **extraarticular vertical fracture** 11A3

**11B**

Type: Humerus, proximal end segment, **extraarticular, bifocal, 3-part fracture** 11B

Group: Humerus, proximal end segment, extraarticular, bifocal, 3-part, **surgical neck fracture** 11B1

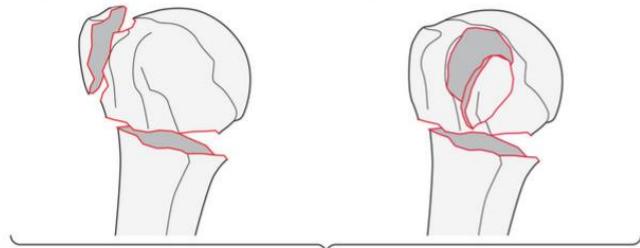
Subgroups:

With greater tuberosity fracture

11B1.1*

With lesser tuberosity fracture

11B1.2*



*Qualifications:

u Intact wedge

v Fragmentary wedge

11C

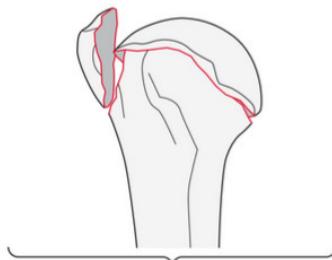
Type: Humerus, proximal end segment, **articular or 4-part fracture** 11C

Group: Humerus, proximal end segment, articular or 4-part, **anatomical neck fracture** 11C1

Subgroups:

Valgus impacted fracture

11C1.1*

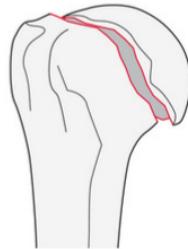


*Qualifications:

- n **Greater tuberosity**
- o Lesser tuberosity
- p Both tuberosities

Isolated anatomical neck fracture

11C1.3



Humerus

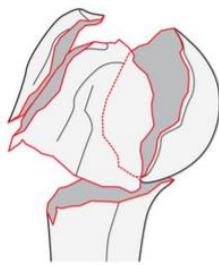
J Orthop Trauma • Volume 32, Number 1 Supplement, January 2018

Group: Humerus, proximal end segment, articular or 4-part, **anatomical neck fracture associated with metaphyseal fracture** 11C3

Subgroups:

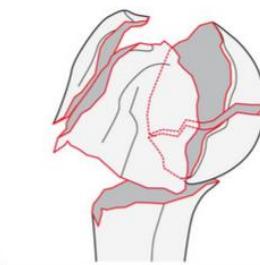
With a multifragmentary metaphyseal segment with intact articular surface

11C3.1



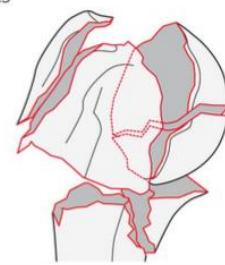
With a multifragmentary metaphyseal segment with articular fracture

11C3.2*



With a multifragmentary metaphyseal fracture, with diaphyseal extension and articular fracture

11C3.3*



*Qualifications:

- x **Simple articular**
- y Multifragmentary articular