Comprehensive AOCMF Classification System

Cornelius CP, Kunz C, Prein J, Audigé L

Mandibular fractures – Level-3 system (cases 22 to 33)
Case 22: Alveolar process fracture

Imaging: axial CT scan & 3D CT Reformations

Description: Alveolar process fracture with superoposterior displacement of the fragment encompassing the teeth 42 - 32. The bony fragment consists entirely of the inner cortex, while anteriorly the tooth roots are torn out of their sockets.

Level 3 Code: 91 Sa
AOCOIAC case CMTR-91-051
Case 23: Alvelolar process fracture region 42-45

Imaging: Panoramic x-ray, sagittal CT scans and 3D CT Reformation
Description: Box like fracture lines encompassing the alvelolar process regio 42-45 - alveolar process fracture. The tooth 42 is traumatically avulsed. Irregular but vertically oriented non-fragmented fracture line amid the mandibular body on the right side. Through the alveolar process the fracture line coincides with the alveolar process fracture.

Level 3 Code: 91 B0a.Sa
AOCOIAC case CMTR-91-052
Case 24: Double fracture with basal wedge fracture within anterior transition zone (on the right) and angle fracture on the left

Imaging: 3D CT reconstruction
Description: Fragmented (minor) basal wedge body fracture within the right anterior transitional zone, and non-fragmented angle-ramus fracture on the left side

Level 3 Code: 91 B1-S0.A0
AOCOIAC case CMTR-91-053
Case 25: Multifragmented mandibular body region

Imaging: 3D CT Reformations
Description: Major fragmentation zone confined within the limits of the left mandibular body

Level 3 Code: 91 m.B2
AOCOIAC case CMTR-91-054
Case 26: Major fragmentation confined to the symphyseal region

Description: Major fragmentation (basal wedge extending over the full vertical height of mandible) within the symphysis region and the adjoining anterior transition zone on the right side.

Imaging: 3D CT Reformations

Level 3 Code: 91 S2

AOCOIAC case CMTR-91-055
Case 27: Major fragmentation extending between the lateral symphysis and the anterior body region

Imaging: 3D CT Reformation
Description: Fracture of symphysis and body on the left (i.e. non-confined to a single region) with major fragmentation. The tooth 34 is avulsed from its socket and displaced into the fracture line.

Level 3 Code: 91 S2-B2
AOCOIAC case CMTR-91-056
Case 28: Body fracture with major fragmentation

Imaging: 3D CT Reformations

Description: Body fracture on the left involving the anterior transition zone with major fragmentation (no bone loss)

Level 3 Code: 91 m.B2
AOCOIAC case CMTR-91-057
Case 29: Major fragmented fracture body and symphysis

Imaging: 3D CT Reformations

Description: Major fragmentation with multiple fragments of varying size between the posterior transition zone on the right and the anterior transition zone on the left

Level 2 Code: 91 B-S
AOCOIAC case CMTR-91-024
Case 30: Multiple fractures of an edentulous mandible

Imaging: Panoramic X-rays, CT scans in coronal, sagittal and axial views, 3D CT Reformations

Description: Multiple fractures in an edentulous Luhr Type II atrophic mandible.
Fracture one: Non-fragmented condylar head fracture on the right with a sagittal fracture line within the lateral pole zone, anteromedial displacement of small fragment and dystopic distortion. No obvious loss of ramus height but lateral displacement of the lower ramus fragment (stump). Fracture two: Non-fragmented fracture confined to the posterior body on the right. Fracture zone three: Fracture confined to the left body with major fragmentation.
Level 3 Code: 91 P.B0.m.B2
AOCOIAC case CMTR-91-058

Condylar neck: Hp0
Case 31: Bilateral body fracture in a severely atrophic mandible

Imaging: 3D CT reconstruction

Description: Luhr Type III severe atrophy of edentulous mandible. Non-fragmented fracture confined to the body on the right, and major-fragmented fracture of the left body. The flat triangular basal fragment on the left extends over the full vertical height of the remaining bone stock. Therefore the fragmentation is classified as major.

Level 3 Code: 91 B0.m.B1
AOCOIAC case CMTR-91-059
Case 32: Fragmented angle-ramus fracture

Imaging: CT axial, sagittal and coronal MPR, NNH, and 3D Reformation
Description: Ramified fracture lines at the top end of the angle-ramus region on the right side, separating off the condylar process and the coronoid at their bases and breaking out an additional triangular minor fragment.

Level 3 Code: 91 P.C.A1.m
AOCOIAC case CMTR-91-060
Condylar neck: B
Case 33: Long reaching sagittal fracture from angle/ramus to symphysis plus bilateral condylar head fractures

Imaging: CT Reformation and MPR CT scans
Description: Extended fracture in sagittal plane from the lower angle/region on the right through the body and into the symphysis. On the outer aspect of the mandible (depicted in the scheme) only the upper and anterior margin of the fracture line is visible. The lingual side exhibits multiple fragments concentrated in the bottom half of the body, i.e. minor fragmentation.

The condylar head fractures run medial to (right) or within the lateral pole zone. Both small fragments are displaced anteromedially with loss of contact and dystopic distortion.
Level 3 Code: 91 P.A0-B1-S0.P

Condylar neck (left): Hp0
Condylar neck (right): Hm0

AOCOIAC case CMTR-91-061