Clinical Indicators: Mandibular Fracture

<table>
<thead>
<tr>
<th>Procedure</th>
<th>CPT</th>
<th>Days¹</th>
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<tbody>
<tr>
<td><strong>Closed Treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without manipulation</td>
<td>21450</td>
<td>90</td>
</tr>
<tr>
<td>With manipulation</td>
<td>21451</td>
<td>90</td>
</tr>
<tr>
<td>With interdental fixation</td>
<td>21453</td>
<td>90</td>
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<tr>
<td><strong>Open Treatment</strong></td>
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<td></td>
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<tr>
<td>With external fixation</td>
<td>21454</td>
<td>90</td>
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<tr>
<td>Without interdental fixation</td>
<td>21461</td>
<td>90</td>
</tr>
<tr>
<td>With interdental fixation</td>
<td>21462</td>
<td>90</td>
</tr>
<tr>
<td>Condylar fracture</td>
<td>21465</td>
<td>90</td>
</tr>
<tr>
<td>Complicated, multiple approaches</td>
<td>21470</td>
<td>90</td>
</tr>
<tr>
<td>Percutaneous treatment</td>
<td>21452</td>
<td>90</td>
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</tbody>
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**Indications**

1. **History**
   a) Trauma
   b) Malocclusion perceived by patient
   c) Trismus
   d) Airway patency

2. **Physical Examination**
   a) Evidence of fracture
   b) Deformity
   c) Mandibular stability
   d) Assessment of occlusion
   e) Status of dentition
   f) Sensory deficit
   g) Evaluate airway
   h) Other coexisting fractures

¹ RBRVS Global Days
3. Tests
a) Radiographs
   • Cervical spine films if appropriate
b) CT (optional)
c) Pre-operative photos (optional)
d) Dental consultation (required)

Postoperative Observations
a) Is the airway compromised?
b) Is there any bleeding?
c) Pain?
d) Nausea?
   e) Wire ligature pliers or scissors at bedside with interdental fixation?
f) Sensory deficit?
g) Facial nerve?
i) Occlusion?

Outcome Review

1. One Week
a) Healing - Any bleeding or infection?
b) Stability - Are the fixation devices stable?
c) Dentition - Have any abnormalities been addressed?
d) Oral hygiene - Is it satisfactory?
e) Mandible x-rays, if appropriate
f) Sensory deficit?
g) Facial nerve
h) Occlusion

2. Beyond One Month
a) Healing - Any radiological evidence?
b) Function - Is mastication satisfactory?
c) Appearance - Is it satisfactory?
d) Infection - Did it require treatment, and if so is it controlled?
e) Inferior alveolar nerve (medial branch) - Is the anesthesia or hypoesthesia resolving?
f) Nutritional status - Is it compromised by inability to chew properly?
g) Occlusion
h) Mandibular stability
i) Facial function

**Associated ICD-9 Diagnostic Codes** (Representative, but not all-inclusive codes)

802.20  Mandible (Closed)
802.25  Angle
802.35  Open (angle)
802.28  Alveolar border
802.38  Open (alveolar border)
802.26  Symphysis
802.36  Open (symphysis)
802.21  Condylar Process
802.31  Open (condylar process)
802.23  Coronoid Process
802.33  Open (coronoid process)
802.29  Multiplicities
802.39  Open (multiplicities) + 802.30
802.24  Ramus
802.34  Open (ramus)
802.22  Subcondylar
802.32  Open (subcondylar)

**Additional Information**

Mandibular fractures can be associated with other serious injuries
a) Patency of airway must be assured first
b) Control of hemorrhage
c) Level of consciousness assessed
d) Other facial fractures
e) Cervical trauma
f) Tetanus prevention

Assistant Surgeon - Y/N
Supply Charges - N
Prior Approval- N
Anesthesia Code(s) -- 00190
Patient Information

Fractures of the mandible (lower jaw) can occur alone or in combination with other facial injuries. The goal of treatment is to facilitate anatomically correct healing and satisfactory function. Treatment of these fractures is by wiring, plating, wiring upper and lower jaws together (intermaxillary fixation), or a combination of the above. Certain fractures may require only soft diet and pain relievers. Special dental treatment plans may be required for children.

Complications or unsatisfactory results may develop after surgery. Infection, slow or impaired healing, abnormal union, or non-union of the fracture, malocclusion, numbness, facial weakness and scarring are some of the unsatisfactory outcomes. As with any other type of surgery, bleeding or infections are possible short term complications, though fortunately, these are rare. Some patients may also develop thick scar tissue or keloid.

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