Intervention and Treatment of Multiple Fractures of the Mandible in Collegiate Baseball Player
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**Background:** During a summer baseball league contest, a 19-year-old Division II collegiate baseball player was struck in the face with a thrown ball on a pickoff attempt by the pitcher. The athlete dove to his left, thereby exposing the right side of his face, which was not covered by any helmet caging or protection. After on-field examination by an athletic training student, supervised by a certified athletic trainer, the athlete walked off the field under his own power. He complained of pain over the right mandible as well as malalignment of various teeth on the right side, though unsure to the extent of displacement. Malocclusion was similarly complained of. Hemorrhaging was present from within the mouth and gauze pads were placed inside the right anterolateral vestibule. Hemorrhage soon decreased. Temporomandibular active range of motion was limited and painful; athlete was able to speak clearly. Visible intraoral inspection was unable to be fully performed due to insufficient ability to open the mouth. Extreme point tenderness was present over the middle-to-posterior mandible, and significant swelling soon formed over the distal aspect of the ramus, angle of the mandible, and posterolateral body of the mandible. The temporomandibular joint was point tender as well and elicited local pain on palpation. The tap test (to left side of mandible) elicited pain on the right mandible. Evaluation of the maxilla (anterior distraction) evoked pain, though to a lesser extent than previous tests. Additionally, the patient complained of local headache and minimal dizziness; concussion was suspected at the time of injury. An ice bag was placed over the right side of the face after secondary evaluation in order to reduce swelling and pain. The athlete was referred to the hospital the following day for radiographic imaging. **Differential Diagnosis:** Mandible fracture; maxilla fracture; tooth subluxation; temporomandibular dysfunction/malocclusion; concussion. **Treatment:** After radiograph testing, four total fractures were confirmed in the right side of the mandible. No concussion was present. The surgical intervention undertaken essentially used minimally invasive metal bracing and rubber bands, as is common with orthodontic bracing, which were increasingly removed over time in order to allow active range of motion. A specific rehabilitation plan was not prescribed. **Uniqueness:** While mandibular fractures are not extremely uncommon in baseball-related activity (nearly 34% of recreational facial/skull fractures were a result of baseball or softball activity), the surgical intervention carried out was unlike a usual maxilla-mandibular fixation, of which has been utilized for nearly all affected patients. This new procedure also allowed the patient to consume whole foods as tolerated, which contributed to his limited weight loss (10-12 pounds) over the roughly 6 weeks of bracing. **Conclusions:** Multiple mandibular fractures resulted in significant swelling and point tenderness over the posterolateral mandible after impact by a thrown baseball. An alternative form of surgical treatment resulted in optimal healing and successful return to play.