



## American Association of Oral and Maxillofacial Surgeons

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### Facial Gunshot Wounds Pose Multiple Challenges

Most facial gunshot wounds (GSWs) are treated at local level 1 trauma centers in urban settings. These injuries are complex because they involve the skull bones, brain, and blood vessels as well as respiratory complications and psychological issues. Their management remains controversial in terms of treatment timing and reconstructive technique. And the associated financial implications also present a challenge because these patients are more likely to be uninsured, with their care costing more than the reimbursement provided.

An article appearing in the August issue of the *Journal of Oral and Maxillofacial Surgery*, “Maxillofacial Gunshot Injuries at an Urban Level I Trauma Center—10-Year Analysis,” describes a study of patients with facial GSWs who were treated at the Boston Medical Center (BMC) from 2001 to 2011. The purpose of the study was to analyze current trends in the presentation and surgical treatment of patients admitted to an urban level 1 trauma center with facial gunshot wounds (GSWs). Data obtained from the institutional trauma registry and hospital records were analyzed regarding length of hospital stay, patient demographic data, treatment cost, and payments.

During the study period, 1,957 patients were admitted with GSWs. Of that total, 136 or 6.9% had suffered injuries involving the facial area—specifically the mandible (lower jaw). Most of the patients were men (87%), and mandibular fractures were found in almost half of them (47%). Most of the fractures were treated within 72 hours of admission. Among other findings, 22% of the patients required second surgeries; 20% had suffered associated neurologic injuries and 9% had sustained cervical spine fractures; 70% required airway management; and the overall patient mortality rate was 9%.

The authors concluded that airway obstruction was the most common life-threatening early complication. Patients admitted with higher stages of shock and lower mental status because of brain, blood vessel, and/or spinal cord injuries had longer hospital stays, higher treatment costs, and extended rehabilitation. Most of the injuries were not life-threatening but were serious, and the vast majority of patients relied on public aid or had no insurance.

Read the complete study findings at *J Oral Maxillofac Surg*; 73: 1532-1539, 2015.

*The Journal of Oral and Maxillofacial Surgery* is published monthly by the American Association of Oral and Maxillofacial Surgeons to present to the dental and medical communities comprehensive coverage of new techniques, important developments and innovative ideas in oral and maxillofacial surgery. Practice-applicable articles help develop the methods used to handle dentoalveolar surgery, facial injuries and deformities, TMJ disorders, oral cancer, jaw reconstruction, anesthesia and analgesia. The journal also includes specifics on new instruments and diagnostic equipment and modern therapeutic drugs and devices.