TACSM Abstract - Case Study

'Fight Bite'- Early Detection and Treatment

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Category: Practicing Clinician

ABSTRACT

CASE HISTORY: This case examines a 29-year-old male that was involved in an altercation and presented symptoms less than 10 hours post-injury. The patient punched a fellow tavern patron in the mouth in the early hours of the morning. Later the same morning, he presented his still bleeding 3rd metacarpophalangeal (MCP) joint to the athletic trainer. **PHYSICAL EXAM**: Upon examination, a laceration less than half of an inch was appreciated, still slowly bleeding. An excessive amount of swelling was noted for the size of the wound, so the athletic trainer suspected a fracture and referred to the orthopedic office for further evaluation. **DIFFERENTIAL DIAGNOSES**: Fractured metacarpal, sprained extensor tendon, tendon sheath rupture. **TESTS & RESULTS**: The orthopedic physician assistant ordered x-rays that revealed no fracture. After ruling out a fracture, the PA immediately referred the patient to the emergency department for a suspected 'fight bite'. **FINAL DIAGNOSIS**: Fight Bite. **DISCUSSION**: A 'fight bite' is sustained when a punch to an open mouth results in the teeth rupturing the skin of the hand delivering the punch. This introduces saliva into the wound which brings a host of bacteria that can quickly spread through the wound into blood stream and any adjacent tissues and joint capsules. **OUTCOME OF THE CASE**: Upon arrival to the ED, the patient was admitted right away. He received a prophylactic tetanus shot and was started on intravenous antibiotics immediately. While the antibiotics helped to stop further swelling, it did not decrease the existing swelling. The following day, 36 hours post-injury, surgery was performed to debride the wound and repair the ruptured joint capsule. It is unknown if the joint capsule ruptured during the blow, or due to the excessive swelling. He was release from the hospital the following day with a stable dressing and no oral antibiotics. **RETURN TO ACTIVITY AND FURTHER FOLLOW-UP**: The patient was released by the physician to return to work with limitations, but his employment agency would not allow a limited return so he had to wait for 10 days. His follow-up appointment was one week after his hospital discharge. The athletic trainer was not allowed to remove the stitches because the doctor wanted to check for further infection in office. After the stitches were removed, the athletic trainer's treatment consisted of flushing massage to push out the pitting edema and range of motion exercises for the MCP and distal phalangeal joints. The patient has regained full function, but reports some pain with flexion due to the scar tissue.