

Visual Diagnosis in Emergency Medicine

PENETRATING HEAD TRAUMA SECONDARY TO BOW-AND-ARROW INJURY

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CASE REPORT

A 38-year-old yak herder presented to the Emergency Department (ED) shortly after sustaining an arrow injury

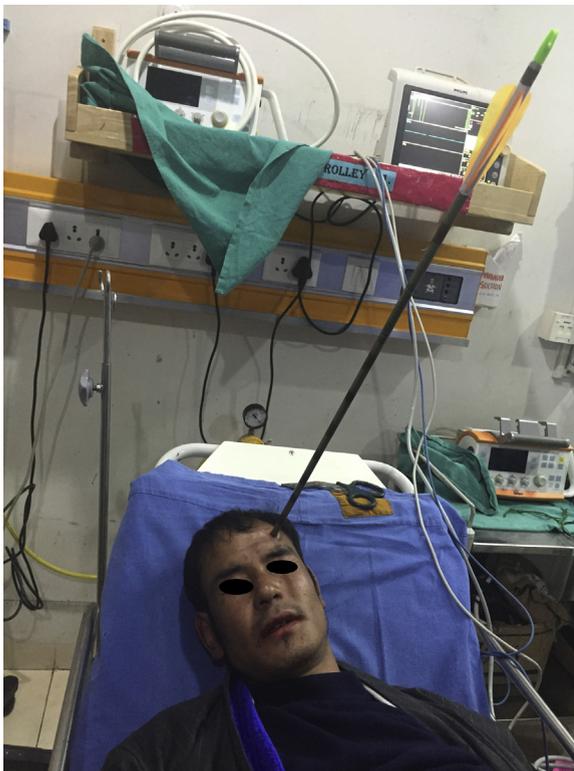


Figure 1. Photo of penetrating bow-and-arrow injury.

to the head. He was previously healthy with no past medical or surgical history, and denied any alcohol or drug use. Physical examination was notable for a large arrow penetrating into the left frontal head, as depicted in Figure 1. The patient was hemodynamically stable, had a normal neurologic examination and a Glasgow Coma Scale score of 15. He reported playing a game of archery with friends in the local highlands when he sustained an accidental, isolated head injury. He denied any loss of consciousness, seizure activity, or vision changes, and reported ongoing headache and nausea post injury. In the

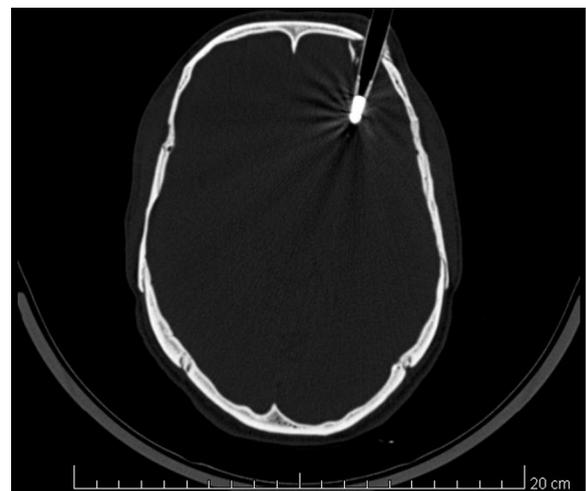


Figure 2. Computed tomography scan (bone window) of penetrating arrow injury.



Figure 3. Computed tomography scan (brain window) of penetrating arrow injury.

ED, the shaft of the arrow was cut to facilitate computed tomography imaging, which revealed a 4-cm penetrating arrow injury to the left frontal skull with an associated left frontal hemorrhage, with mild local mass effect and minimal midline shift (Figures 2–4). The patient was promptly taken to the operating room by the surgical team, where, under general anesthesia, the arrow was removed from the left skull in addition to a small bone fragment. He was started on prophylactic phenytoin and antibiotics and admitted to the intensive care unit. The patient had an uncomplicated postoperative course and was discharged home on hospital day 6. Follow-up at



Figure 4. Computed tomography scan (three-dimensional reconstruction) of penetrating arrow injury.

1 year revealed a full recovery with no long-term neurologic deficits.