A Lucky Penetrating Skull Injury with a Knife

Rachid Madkouri*, Catherine Cao and Tuan Le Van

Department of Neurosurgery, CHU François Mitterrand, Dijon, France

Keywords

Penetrating head trauma; Stab wound; Skull base

Clinical Image

A 44 year old man was referred to our department after being stabbed in the face with a knife during an aggression. A physical examination demonstrated that the knife was inserted just upper the left eyelid region (Figure 1). The patient was totally aware and had no neurological deficit with a Glasgow Coma scale of 15. Visual acuity was intact and there was no bleeding impairment.

Skull radiographic studies showed the course of knife in the skull base. Computed tomographic imaging revealed that the blade of the knife had transfixed the left sinus frontal bone, the ethmoid bone, crossing the midline and reached up the body of the sphenoid bone (Figure 1). The tip of the knife was in close proximinity to the internal right carotid, neighboring his intracavernous portion. Contrast studies demonstrated no apparent arterial damage or extravasation. Optical nerves were preserved and no parenchyma injury was observed.

The patient was rapidly scheduled for surgical intervention. Skin incision was made around the entrance site of the knife. A craniotomy of the anterior and posterior wall of the left sinus frontal bone was performed. And the knife was pulled out carefully. No severe bleeding occurred during the removal. Prophylactic antibiotics were prescribed to prevent any infection.

Post operative CT scan showed any complications such as hematoma. After the surgery, the patient was hemodynamically stable and his neurological examination was normal. The patient was discharged 2 days later uneventfully.

The incidence of stab injuries in the population is not precisely determined. Recent studies have shown that the incidence of skull stab injuries is lower in Europe compared to developing countries [1].

Reference