

Multiple Penetrating Cranio-cerebral Homicidal Nail Injury: Case Report And Review Of Literature

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Citation

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Abstract

Penetrating craniocerebral injuries commonly reported are accidental or suicidal. We report a case of multiple penetrating homicidal injuries to the cranium treated successfully.

INTRODUCTION

Penetrating injury to the brain by foreign bodies is accidental or suicidal¹. There are very few reports in literature where nails have been used to cause grievous injury with homicidal intent. We report such an unusual case where 3 nails had been hammered in the skull of 20-year-old male with homicidal intention. Nail extraction was done. The patient had uneventful recovery with no focal neurologic deficit.

CASE REPORT

A 20- year old male came walking to the emergency surgical room with history of 3 nails hammered into the skull 12 hours ago. He had no history of unconsciousness, vomiting or convulsion. On examination, the vital parameters were normal. Patient was fully conscious and oriented with no focal neurologic deficit. He had 3 nails inserted in his skull one in the midline, one on each side of the midline (Fig 1).

Figure 1

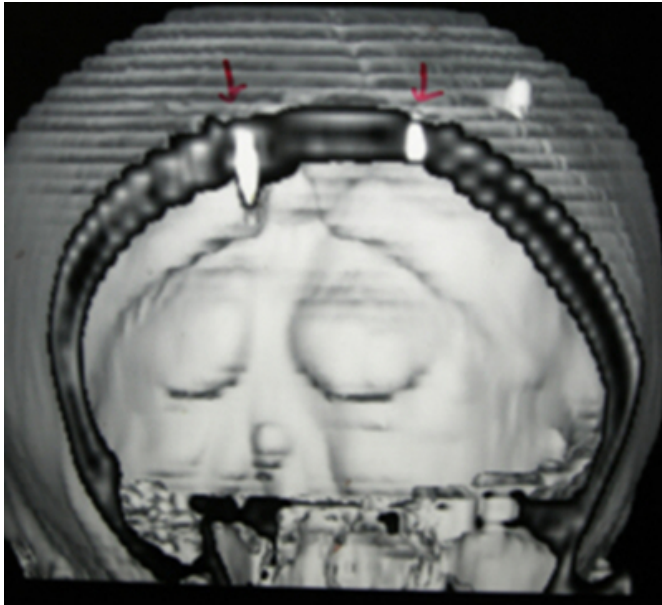
Figure 1: Three nails seen pierced into the skull.



Computed tomography of the skull (CT scan) revealed the 3 nails piercing into the brain parenchyma (Fig 2).

Figure 2

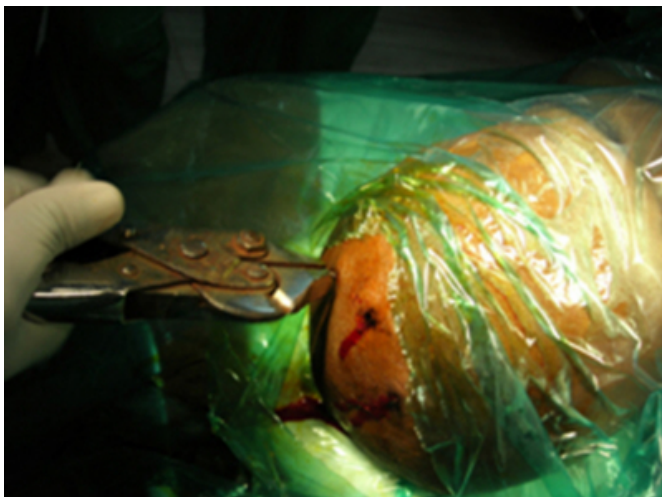
Figure 2: 3-D reconstruction of the CT scan showing nails piercing the brain.



After resuscitation, these nails were extracted with gentle rotatory movement under sedation with complete aseptic precautions (Fig 3).

Figure 3

Figure 3: Rotatory movements used to extract the nails.



Following extraction of the nail, there was minimal bleeding from the puncture side. The skin edges were cleaned and sutured. Post procedure, the patient was started on injectable antibiotics for 10 days and had uneventful recovery with no

focal neurologic deficit. Follow-up CT scan of the head revealed hemorrhagic contusion along the nail track.

DISCUSSION

Penetrating craniocerebral injuries caused by foreign bodies is unusual in civilian practice^{1,2,3,4}. Most of them have occurred accidentally in industries, or with suicidal intentions^{5,6,7,8}. Reports of nails being used to cause craniocerebral injuries with homicidal intention is uncommon⁹. Definitive neurosurgical intervention is recommended at the earliest because of the possible risk of deterioration depending on the type of injury and extent of cerebral destruction. Various techniques have been described for extraction of these nails^{2,3}. However the most simplest technique is by gentle extraction⁽⁹⁾. Most of the cases reported in the literature survived and suffered no significant neurological deficit^{7,8}.

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