# Accidental penetration of screw driver in the cranial cavity

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### **Summary:**

Fac Med Baghdad<br/>2010; Vol. 52, No. 2<br/>Received Feb., 2009Background: penetrating foreign body is a common problem but penetration by screw driver is very<br/>uncommon<br/>Patient & method: A nine years old boy presented with penetrating screw driver through the medial<br/>canthus of the eye.<br/>Result: the foreign body removed under GA with good result.<br/>Conclusion: minimal invasive procedure are preferred when we have penetrating head injury.<br/>Keywords: foreign body, penetrating head injury.

## Introduction :

Penetrating head injury is a common entity, the intent of treatment in such penetrating wounds is to increase the incidence and quality of survival by prevention of early and late infection,by control and relief of increased intracranial pressure , and reduction of secondary damage to the affected brain tissue.

#### The case

H.A.A. who is nine years old completely healthy fall down on screw driver, the bar entered through the right medial canthus ,

The family brought the child to emergency room in Baghdad medical city ,neurosurgical consultation was done at 6:00 PM (2 hours' after the trauma )



On examination: child fully conscious (GCS 15/15), no neurological deficit, both eyes intact .no CSF leakage was present. Skull X ray was done to the patient





Brain CT was mandatory to exclude intracranial hemorrhage.

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We admitted the patient and prepare him for surgery telling the family that we will try to pull the bar under GA & if we fail we will do craniotomy. In the theatre under GA we were able to pull the bar, few cc of CSF came out.

After surgery the patient was kept in the ward for ten days on prophylactic antibiotics & antiepileptics . Post operatively brain CT was done to exclude hematoma formation



The patient didn't develop CSF leakage nor meningitis (but develop meningism for tow days ).

Patient discharged home with good condition.

# **Discussion:**

We reviewed many literature on foreign body, including Cushing study at 1918, dodge at 2002, Hogan at 1971, the well known Jannet at 1981, all these studies are in favor of extensive procedure with all types of foreign body, including craniotomy & dural repair, but we noticed in this patient the minimum procedure gave us excellent result.

**Conclusion**: minimal invasive procedure are preferred when we have penetrating head injury

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