An Arrow in the Nasal Cavity, Ethmoid and Nasopharynx

S. K. Basu, Reader, **S. N. Bandyopadhyay**, R. M. O. cum Clinical Tutor,
H. Bora, Reader, Department of E. N. T.,
R. G. Kar Medical College and Hospital, Calcutta 700 004.

Abstract

A penetrating foreign body (Metallic arrow) involving the ethmoidal air cells nose and nasopharynx is being reported.

A 30 year old man was brought to us with history of being struck on the right side of the face with an arrow durring a fight among the tribals one day back. The whole of the arrow head went inside with only the tail rod protruding out through the lacerated wound of entry which extended from 0-5cm. below the medial canthus of the right eye down to the begining of nasolabial groove. The wooden body of the arrow-stick was cut of by the referring doctor to facilitate the transfer of the patient. The whole of the right side of the face was swollen. There were blood clots in the A. N. S. but no active bleeding at the time of presentation. The vision was normal and there was no other neurodeficit.

X-ray of the skull anteroposterior and lateral views and of the paranasal sinuses - occipitomental view were taken (Fig. 1 and 2) which showed the radio-opaque shadow of the arrow passing obliquely downwards through the right ethmoidal labrynth, right nasal cavity, piercing the nasal septum, to the left cavity with its tip in the nasopharynx at the level of C 1

Fig 1. X-ray skull, lateral view showing the radio-opaque foreign body

Keeping the possibility of the arrow having been poisoned, in mind, (which is said to be a common custom among the tribals) the patient was kept under observation overnight and was scheduled to be operated on the next morning.

Exploratory surgery was carried out under general

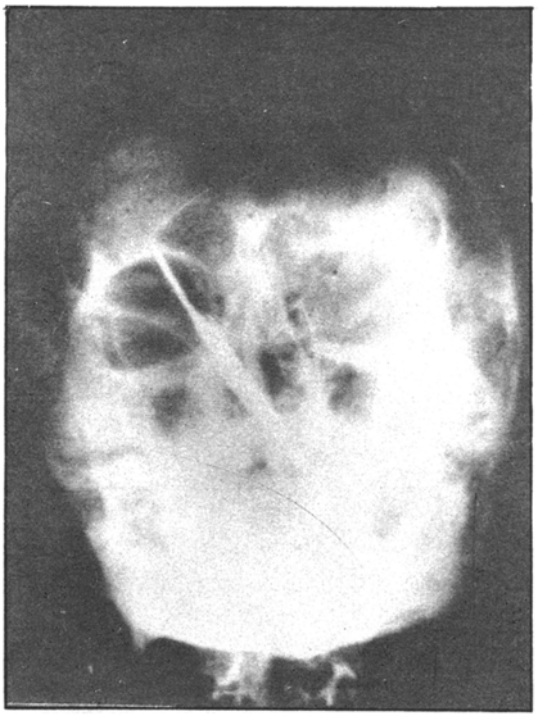

Fig 2. X-ray P. N. S., O. M. View showing the raio-opaque foreign body

anaesthesia. The existing wound of entrance was extended on either end as if an extended Lynch Howarth incision for external ethmoidectomy was being given. The broken piece of bone were removed and further exploration was kept to a minimum, just enough to expose both the flanges of the broader posterior end of the arrow-head. With little manupilation the arrow was disimpactd and

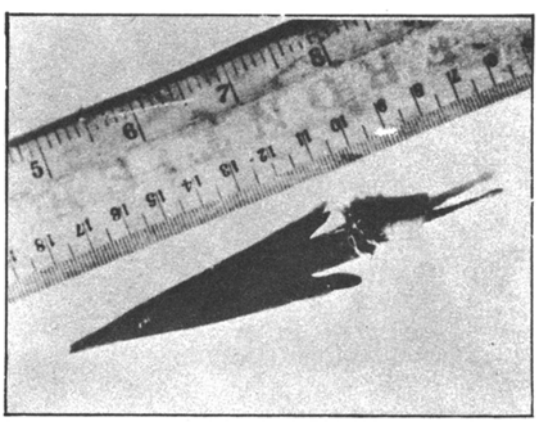

Fig 3 The arrow head after removal

removed. Neither of the maxillary antra were involved. The post-operative period was uneventful.

After removal, the penetrated portion of the arrow was measured to be about 8 cm in length and the posterior flanges were 2 cm apart (Fig.3)

Discussion

While attending such injuries, it is better to allow some time to pass for any neurodeficit to appear a definite risk of posining by the arrows used by the tribals is a possibility. Otherwise anaesthesist may find it difficult to monitor such patient under G. A.

Though no vital structure was injured in this reported case, such unusual foreign body usually carry the risk of injury to the orbit, maxillary artery, maxillary nerve, base of the skull and the spinal cord.

Clinical and Radiological examination of the patient and Foreign body examination of is paramount importance to ensure that no fragments are left behind.

References

1. *Agarwal, R.M. ; Mehrotra, A. K.; Sasibabu, K. and Mohan, V. (1980) : A metallic foreign body in the maxillary antrum and the nasopharynx. Indian Journal of Otolaryngology, 32 : 52.*
2. *Gadre, K. C. ; Bhargava, K. B. ; Juvekar, R. V. and Abhyankar, U. S. (1980) : Air gun pellet in the ethmoidal sinus. Indian Journal of Otolaryngology, 32 : 53*
3. *Garces, S. M. and Norris, C. W. (1972) : Unusual frontal sinus foreign body. The Journal of laryngology and Otology, 86 : 1265- 1268*
4. *Ghosh, L. M. ; Roy, P. ; Dandapath, A. and nandi, D. (1978) : Foreign body in the pterygopalatine fossa. Indian Journal of Otolaryngology 30 : 118*
5. *Purohit, J. P.; Kumar, G. and singh, P. N. (1996) : An unusual foreign body in infratemporal fossa. Indian Journal of Otolaryngology and Head and Neck Surgery , 48 : 323 - 324.*
6. *Ramadass, T. ; Prabhakaran, M and kumar, V. S. (1996) : Air-rifle bullet in the sphenoid sinus. Indian Journal of Otolaryngology and Head and Neck surgery, 48 : 51 - 52.*