An Unusual Type Of Penetrating Injury Into Popliteal Fossa

S Bajracharya, G Khanal, R Rijal, P Gupta, M Singh

Citation

S Bajracharya, G Khanal, R Rijal, P Gupta, M Singh. *An Unusual Type Of Penetrating Injury Into Popliteal Fossa*. The Internet Journal of Orthopedic Surgery. 2006 Volume 6 Number 2.

Abstract

We present a case of an unusual type of penetrating injury into popliteal fossa. The metal arrow in the iron fence was penetrated into popliteal fossa while crossing the fence in the drunken state. Surprisingly and fortunately there was no neurological deficit at the time of injury, during transportation from the site of event to Emergency room of hospital at the time of presentation, during removal and after removal of the foreign body. The patient gained full range of movement without residual effect after the follow up of 6 months.

CASE PRESENTATION

A 30 years male was drunk at midnight during the festival (of Tihar) while jumping from the Iron bar fence suddenly pierced the arrow head of the iron bar fence on the posterior aspect of the left thigh. The patient remained on the fence for 2 hours unnoticed by his family members. After 2 hrs, his family members noticed and the part of the iron fence was cut by gas welding then brought to BPKIHS Emergency Room along with the part of the iron fence with arrow head on the posterior aspect of the left thigh. The resuscitation was done along with analgesics, antibiotics, tetanus toxoid, tet glob with proper coverage of the wound with antiseptic solution. The patient along with that iron fence is shown in the Fig (A) and its radiographs in Fig (B). Then the patient was prepared for removal of foreign body at Emergency Operation Theatre. The patient was put on prone position after subarachnoid Block. With midline posterior approach extending the wound from where the arrow part of the iron fence penetrated, was removed without damaging neurovascular bundle. The arrow was on the medial aspect of the left femur, hooking on the medial cortex of the femur and periosteum. The foreign body was removed en bloc as shown in Fig (C). The wound was lavaged, debrided and an extended incision was sutured and a 18 Fr suction drain was inserted. The intra-operatvie and post-operative period was uneventful. After 2 days, the drain was removed and the patient was discharged with non weight bearing Crutch walking till heals of pain. By 6 weeks, the wound completely healed and the patient walked with some difficulty. The range of movement of affected knee was 20° less to normal by the end of 3 rd month follow up. At the end

of 6 month the patient was fully recovered and satisfied.

Figure 1

Figure A: An arrow with iron fence penetrating into the popliteal fossa of the patient



Figure 2

Figure B: Showing radiographs (a) anteroposterior and (b) lateral of thigh along with penetrating foreign body

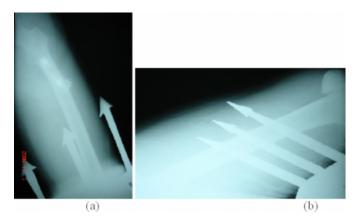
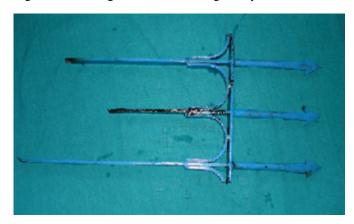


Figure 3Figure C: showing the removed foreign body en bloc



DISCUSSION

Yang et al presented a case of traumatic bamboo foreign body penetration through the posterior thigh extending cephalad into the pelvis sustained during skiing. The unsuspected bamboo foreign body was missed prospectively on the initial portable trauma radiograph of the pelvis, but was retrospectively quite apparent as a linear 1222-cm radiolucent region overlying the left pelvis and hip region. On CT examination, the bamboo stick appeared as a round

cylindrical air-filled structure of high density compared to soft tissue - the typical appearance of bamboo. Bamboo foreign bodies can be recognized radiographically by this typical appearance, since it is one of the few wood products that causes high attenuation relative to soft tissue on CT.

We could not find such type of penetrating injury without neurological defect in literature search in MEDLINE, PUBMED etc.

Therefore we present this unusual type of case report which was well managed with good outcome.

CORRESPONDENCE TO

Dr Suraj Bajracharya MBBS, MS (Orthopaedics)
Department of Orthopaedics B P Koirala Institute of Health
Sciences Dharan, Nepal E mail: drsurajbajra@hotmail.com
Phone No: 977-25-525555 Ext 2016 (Off) 3100 (Res) Fax
No: 977-25- 520251

References

1. Ik Yang, Curtis W. Hayes, Jon A. Jacobson, David A. Jamadar, Stewart Wang. Unique foreign body injury: bamboo penetration of thigh and pelvis while skiing Emergency Radiology Springer Berlin / Heidelberg 2002 Oct Vol: 9; No: 4

Author Information

S. Bajracharya

Department of Orthopaedics, B P Koirala Institute of Health Sciences

G.P. Khanal

Department of Orthopaedics, B P Koirala Institute of Health Sciences

R. Rijal

Department of Orthopaedics, B P Koirala Institute of Health Sciences

P. Gupta

Department of Orthopaedics, B P Koirala Institute of Health Sciences

M.P. Singh

Department of Orthopaedics, B P Koirala Institute of Health Sciences