

*Short Communication*

**SURGICAL MANAGEMENT OF AN ARROW HIT DOMESTIC BULL (*BOS INDICUS*)  
- A CASE REPORT**

Deepak Sharma<sup>1\*</sup>, Hrishilekh Kumar<sup>2</sup>

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**ABSTRACT:** A free range bull was hit by an arrow. It was brought to the Veterinary Centre of Buxa Tiger Reserve Forest, Alipurduar, West Bengal, India. Immediate surgical intervention was started and the arrow was operated out. The animal was cured uneventfully.

**Key words:** Bull, Arrow hit, Operation.

Human-animal conflict is on a rise worldwide, be it domestic or wildlife. The present case report is from Rajabhatkhawa village adjoining to Alipurduar town in the district of Alipurduar, West Bengal, India. Some local people noticed one injured arrow hit bull and brought to the Veterinary Centre of Buxa Tiger Reserve for the necessary help. After physical examination, it was decided that the case need immediate surgical intervention to remove the arrow from the body to relieve the animal.

**Case history and treatment**

The bull was an indigenous breed and was weighing around 300 and of 7-8 years of age. The wound area was prepared aseptically and field block anaesthesia was done with infiltration of 8 ml of 2% Lignocaine. As the animal was struggling even after the infiltration of local anaesthesia, 6 ml Ketamine injection (100mg/ml) was administered intravenously at the dose rate of 2 mg/kg body weight with normal saline. It took around 5 minutes for the animal to become anaesthetized. The respiration was observed to be normal, minimal salivation was noticed and eyes were open.

The site was prepared aseptically swabbing the area with podivone iodine. Subsequently, an incision of 2-3 cm adjacent to the arrow hit site was given. The skin was flapped out and the muscle layers were reached (Fig. 1). The arrow head had pierced so deeply that it had tear the bicep femoris, middle gluteus and tensor fascialata muscles of the hip and thigh. The surrounding area had been necrosed and blood infiltration was seen. The arrow was then pulled out with minimal force to avoid further

tear. Arrows with barbs was removed in an anterograde direction along the line of its trajectory to avoid snagging blood vessels and other structures(O'Neill *et.al*). Neosporin antibiotic powder was poured within the incised area. Later, the muscle layers were sutured using absorbable suture material by simple continuous pattern. The outer skin layer was sutured with coarse nylon thread in simple interrupted pattern. The area was again swabbed with podivone iodine solution and a thin layer of cotton with tincture benzoate was applied over the sutured area (Fig. 2.).

The following medicines were used during the surgical technique:

- i. Injection Normal saline (0.9%) -500 ml intravenously was given at stat.
- ii. Inj. Tetanus Vaccine (Each dose of 0.5ml contains Tetanus Toxoid (=40IU) ) - 1ml intramuscularly.
- iii. Inj. Intacef Tazo (3375mg, Intas Pharmaceuticals, contains Ceftriaxone-3000mg & Tazobactam-375mg) - 1vial intravenously.
- iv. Inj. Melonex (Intas Pharmaceuticals, each ml contains Meloxicam BP 5mg) – 10ml intravenously.
- v. Inj. Dexona vet ( Zydus Animal Health Ltd., each ml contains Dexamethasone Sodium Phosphate-4.4mg) – 5ml intramuscularly.
- vi. Inj. Avilin(Intervet India Pvt.Ltd., each ml contains Pheniramine Maleate I.P-22.75mg) - 10ml intramuscularly.
- vii. Inj. Tribivet (Intas Pharmaceuticals, each ml contains Thiamine Hcl-50mg, Pyridoxine Hcl-50mg & Cyanocobalamin-500mcg) – 8ml Intramuscularly.

<sup>1</sup>Veterinary Officer, Buxa Tiger Reserve, Alipurduar, West Bengal, India.

<sup>2</sup> Ex-Veterinary Officer, VCBC, Rajabhatkhawa, West Bengal, India.

\*Corresponding author. e- mail: deepvetbuxa@gmail.com



**Fig.1. Shows arrow hit bull and surgical management.**



**Fig. 2. After suturing of the arrow hit wound.**

The bull was tied and fed with semi-liquid feed and the above medicines were injected during the post operative phase for 7 days. During those days, proper dressing was done with antiseptic solution and Himax ointment was applied topically. After 10 days, the wound had dried up totally and the sutures were removed.

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