# Fatality Due to Bear Attack – A Case Report

Hemanth Raj M N <sup>1</sup>, Pavan Kumar G <sup>2</sup>, Madhu Sudhan S <sup>3</sup>

#### Abstract

Attack on humans by bears is relatively rare event, and the intent is always defensive. Bear attacks can be fatal and often hikers, hunters, fisherman, and others in bear country take precautions against bear attacks. Here we present a case of death due to bear attack, where injuries where sustained to the thigh.

Keywords: Bear attack; Injuries; Infection; Septicaemia.

© 2018 Karnataka Medico Legal Society. All rights reserved.

### Introduction:

Attack on humans by bears is relatively rare event, and the intent is always defensive. A bear attack is an attack by any mammal of the family Ursidae, on another animal, although it usually refers to bears attacking humans or domestic pets <sup>1</sup>. Here we present a rare of case of fatality due to bear attack.

## **Case Report:**

A 50 year old female was admitted to our Hospital with a history of bear attack. On collecting detailed history of the case by the deceased son (Eye witness) – Bear attack was 14 days back at around 11pm in the night, when she had been for backyard of the house for nature call. Initially admitted & treated at local hospital and then referred to our Hospital. Patient had sustained injuries over the left thigh and was in anxious state with on and off fever, raised blood pressure and low sodium count, which were corrected with medications and suturing of the wound and regular wound dressing was also done. Later after 12 days, patient was shifted to our hospital, where he was in semiconscious state with high spike of fever and high total WBC count, who finally

<sup>1</sup>Professor, <sup>2</sup>Assistant Professor, Department of Forensic Medicine & Toxicology, Shridevi Institute of Medical Sciences & Research Hospital, Tumkur.

*Correspondence:* Dr. Madhu Sudhan S Email- madhushankar49@gmail.com

Contact- +919902269303

Received on 10.06.2017

Accepted on 09.08.2017

collapsed and succumbed to death.

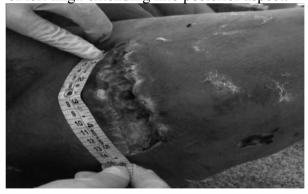
The dead body was brought to our mortuary and autopsy was conducted on the same day. External examination revealed two infected wounds.

- 1.Infected wound, obliquely placed, measuring 15cm x 4cm x muscle deep was present over the medial aspect of upper 1/3<sup>rd</sup> of left thigh extending to back of thigh, which was 6cm below inguinal region and 27cm above the left knee joint. The wound showed greenish yellow pus discharge and slough at places; wound edges were inflamed and showed removed suture marks.
- 2.Infected wound was measuring 4cm x 3cm x muscle deep present over posterior aspect of left thigh, which was situated 35cm below the left iliac crest and also showed discharge of greenish yellow coloured fluid.
- 3. Abrasions were present over back of right elbow and over right knee.

Internal examination shows both pleural cavities were containing 100ml yellow coloured fluid. Lower lobes of both lungs was consolidated C/S exudes blood stained purulent fluid and Spleen was enlarged weighing 225 grams. Cause of death was opined as death due to septicemia consequent upon injuries sustained to left thigh. Injuries were consistent with bear attack.

## **Discussion:**

Bear attacks are relatively rare, but frequent enough to be of concern for those who are in Fig: Two infected wounds in the inner aspect of left thigh extending into posterior aspect.



bear habitats. Bear attacks can be fatal and often hikers, hunters, fisherman and others in bear country take precautions against bear attacks <sup>1</sup>.

There are eight types of bears in the world. They include the American Black Bear, Brown Bear, Polar Bear, Giant Pandas, Asiatic Black Bear, Sloth Bear, Spectacled Bear, and the Sun Bear. The sloth bears inhabit forests and tall grasslands in India, Nepal, Sri Lanka, and Bhutan. For those who frequent forests in India, sloth bear present a considerable danger, worse than that of tigers or leopards <sup>2</sup>.

Injuries due to bear jaws are in the form of puncture wounds, lacerations, abrasions caused due to canines; crush injuries and bruises caused due to molars; cuts caused due to incisors. Injuries due to paws include abrasions, bruises and incised looking wounds lacerations, due to nail tips. Other injuries may cause fractures; either of skull bones and axial skeleton <sup>3</sup>.

The physical nature of injuries by animals (bears) can extend from trivial scratches to fatal wounds. Bargali H S <sup>4</sup> did a study in a forest division in India to describe sloth bear attacks and human injuries while defining an "attack" as an encounter that ends with human injury or death. His study observes that attacks were predominantly by a single bear (93%) and rarely by 2 (4%) or 3 bears. Most victims suffered multiple injuries (52%): single injuries on legs (25%), hand (12%), and head (8%). He also quoted that 8% of bear attacks were fatal. These injuries involves substantial struggle on

the part of victim on the ground, which forces mud, grass and other contaminating material into wounds. Death due to bear attack/bite is due to hemorrhage due to vessel disruption, injuries and its crush consequences. suffocation, wound contamination leading to sepsis (septicemia), rabies etc. In our case in spite of starting with broad spectrum antibiotics and good wound care, the wound was infected, which could be due to involvement of upper thigh region, repeated soakage with urine and lowered immunity in elder people.

Hence, it is necessary to draw a protocol for the treating physician and autopsy surgeon to act with lot of special care in case of an animal attack with considerations like identification of species, risk of rabies, bacteriology of the wound and management.

## **Conflict of Interest:** None

### **References:**

- 1. Bear attack. Wikepedia. <a href="https://en.wikipedia.org/wiki/Bear attack">https://en.wikipedia.org/wiki/Bear attack</a>. Accessed on 06/03/2017.
- 2. Yoganand K, Rice C G, Evaluating Panna National Park with Special Reference to Ecology of Sloth Bear (Melursus ursinus). Final Project Report, Wildlife Institute of India, Dehradun, India, 2005.
- 3. Phalke B, Waghmare S, Zine K U. Journal of Forensic Medicine, Science and Law, A Journal of Medicolegal association of Maharashtra 2014; 23(2).
- 4. Bargali H S, Akhtar N, Chauhan N P S, Characteristics of sloth bear attacks and human casualties in North Bilaspur Forest Division, Chhattisgarh, India. Ursus. 2005; 16(2):263–267.