Case Report

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Medico-legal Opinion in Case of Assault by Bear: A Case Report

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Abstract

Bear bite injuries have become a common occurrence as the forest covers and natural habitats are diminishing.[1] Patients injured in bear attack present with different patterns of injuries. A common protocol about the medico-legal cases of animal bite its opinion is not present in the system. These animals usually attack in remote areas where composite trauma centers do not exist and urgent referrals of these patients is essential. Final outcome influences the medico-legal opinion and compensation.[2] The goal of the present case to document the injuries suffered in bear bite and provides the required medico-legal opinion.

Keywords: Bear bite; Medico-legal opinion; Compensation; Forest; Degloving injuries.

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Introduction

The chance of a human encountering a bear is on the rise as the remote bear territory is diminishing.[3] Bear bite injuries to the head and neck region can result in facial disfigurement with physical and psychological consequences. Bear bite wounds usually range from minor scratches to major trauma that involves fractured bone, joint damage, skin and deep tissue injuries. Facial defects caused from such bite injuries not only create functional problems but also serious psychological problems, which can cause the individual to avoid social contact. Medicolegal issue are often raised regarding such injuries Depending on the seriousness of injuries resulting from an animal attack, victims are entitled to compensation for the loss or damages he has suffered. Medico-legal opinion is often indispensable to ascertain the magnitude of compensation that the person is entitled to.

Case report

A 60 years old male reported to the Casualty of Kasturba Hospital, Mahatma Gandhi Institute of Medical sciences, Sewagram, Wardha with multiple injuries over chest and degloving injury at scalp. A detailed history taken from the patient revealed an episode of: Attack by a Bear on *6/9/2012* at about *7.30 AM* in the morning. The victim was attacked while on the way to his farm, sustaining multiple injuries over the head and chest. He was immediately taken to Kasturba Hospital, Sewagram

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with multiple abrasions and a degloving injury over the scalp. Following injuries were noted by the forensic physician, showing are as in (Images 1–4):

1. A lacerated wound of length *19 cm*, with varying width from *4 cm* to *8 cm* and depth up to the skull bone, present over the left fronto-parieto-occipital region. It is degloving in nature with a flap of the scalp, of size *11 cm* × *8 cm* avulsed from the underlying bone. No foreign body appreciated. Margins of the wound are irregular.
2. A red colored abrasion of size *3 m* × *2 cm* present over the left shoulder *3 cm* below the acromion process, no foreign body is seen.
3. At armpit fold two parallel contused abrasions are appreciated both are about *3 cm* in length, breadth of *2 cm*, red in color.
4. Multiple red colored abrasions of varying sizes ranging from *1* × *1 cm* to *2* × *2 cm* over the middle of the chest.
5. A red colored contused abrasion of size *2* × *1 cm* over the tip of right thumb.

Fig. 1: Showing degloving

Fig. 2: Showing degloving

Fig. 3: Showing exposure of scalp with loss of tissue

Fig. 4: Showing multiple injuries over chest armpit and left shoulder

General examination revealed nothing important. This case was reported to Sewagram police station but not as a medico-legal case. The provisional medical report with medico-legal opinion were provided as under:

Opinion as to gravity of injury: Injuries no 2, 3, 4, 5 was simple in nature and opinion for injury no 1 was reserve.

X-ray skull A/P advised & the opinion regarding Injury no 1 would be issued after perusal of the *X*-ray report, treatment records up to the time of discharge from the hospital and re-examination of the patient on a later date. The patient was discharge on 12/9/2012, after a treatment period of nearly *6 days*.

Opinion as to age of injury: All injuries were fresh.

A request was submitted by forest department to provide the final opinion on 10/10/2012, accompanied by the patient. Material received from forest department:

1. Request letter;
2. Xerox copy of MLR;
3. *X*-ray opinion report from Radiology Dept of MGIMS;
4. Treatment records.

Material taking into consideration: All above mentioned material.

Details observed:

X-ray revealed no bony injury Treatment records revealed no profuse blood loss, nor any surgical interventions. There was no history of vomiting, unconsciousness;

Re-examination of Patient/victim was done:

All wounds except injury no 1 healed out but injury no 1 shows scar mark; Taking into consideration all the above mentioned details, injury no 1 is opined as grievous in nature, due to the permanent scar on the face.'

Discussion

In victims of bear attack, these injuries are commonly due to the powerful 'slap' inflicted by the front paw of the bear. Bear is declared threatened animal and rarely comes in human contact. Recent decrease in forest area has, however, increased the chances of bear-human interaction, hence, causing injuries to humans. The two major types of bear attacks are defensive and predatory. Defensive, attacks are the result of abrupt, unexpected encounters that follow in response to a perceived threat to cubs, individual space or food supply, and often involve activities such as hiking and hunting.[4] Predacious attacks are far less common and occur when humans are perceived as a source of food. In these instances, the bear more often invades human territory, *e.g.*, camping or picnicking sites. Predacious attacks result in the majority of fatal encounters. Bear bite injuries with tissue loss may result in severe disfigurement with significant functional and aesthetic concern.

In the present case, since, the victim was attacked by the bear while on the way to his farm, it could be considered as a defensive measure exhibited by the animal. 'More often, animal attacks are not included as medico-legal cases as the police cannot file a case against an animal.' But in this medico-legal issue arises because the Forest Department wants to record the nature of the injury; whether it was simple or grievous.' As per their rules compensation will be provided on the basis of severity.

Conclusion

It can be said at the conclusion that wild-animal attacks, though rare, remind us that humans can still be food or prey. Awareness, education, knowledge, and prevention, rather than the elimination of animal populations, may be the best way to control wild-animal attacks on humans in the future. It is important to decide whether the injury was simple or grievous 'It is true to say that the final opinion in every medico-legal report should be based on all aspects concerning the case.

Ethical clearance: Taken from ethical committee MGIMS.

Source of funding: There was no need due to case study.

Conflict of Interest: None declared.

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