Case Report

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Tiger Attack Fatality- A Case Report

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ABSTRACT

Human-wildlife conflicts, particularly those involving large predators like Panthera species (lions, leopards, and tigers), have become an increasing global public health concern in recent years, especially in Southeast Asia. These conflicts often result in serious injuries and fatalities within affected communities. While not uncommon, attacks by Panthera species can lead to devastating traumatic injuries due to the animals' strength and powerful bites. In this specific case, a worker at Abheda Biological Park entered the tiger enclosure and was attacked, sustaining multiple injuries that led to his death. Upon examination, the victim had numerous puncture and laceration wounds to the neck and chest, with internal injuries affecting the neck, lungs, and cervical spine. Serious injuries from wild animal attacks, especially from tigers, are commonly characterized by deep tissue damage and lacerations due to the animal's powerful jaws and sharp teeth. This case report aims to highlight the specific injury patterns associated with tiger attacks, offering critical insights for healthcare providers. By understanding these patterns, medical professionals can be better equipped to treat the severe and often unique injuries resulting from such encounters in the future.

Introduction

Human-wildlife conflicts, which result in nuisances and injuries, have become an increasing public health concern globally in recent years, particularly in the Southeast Asian region[1]. Though uncommon, injuries from wild animals tend to be severe, often resulting in significant mortality and morbidity[2]. While not uncommon, attacks by Panthera species (lions, leopards, and tigers) result in a considerable number of traumatic injuries within communities[3]. Gaining knowledge about the typical injuries and complications resulting from big cat attacks may enable earlier detection of concealed and treatable injuries, both at the scene and in a hospital setting. Additionally, the practice of keeping tigers and other large predators in private settings is becoming more common, with unregu-

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lated private "zoos" emerging in rural and suburban areas nationwide[4]. Consequently, attacks by captive predators are increasing. This case report seeks to establish injury patterns associated with tiger attacks, allowing future healthcare providers to prepare effectively for these distinct types of injuries.

Case report

While working at Abheda Biological Park, the deceased entered the tiger's enclosure and was subsequently attacked by the animal, sustaining multiple injuries that ultimately led to his death. An external examination revealed several abrasions and puncture lacerations predominantly on the left side of the body. Multiple puncture wounds were observed on the neck, affecting the anterior, right, and left sides (Figures 1 and 2). A puncture laceration measuring 4 × 2 cm, penetrating the soft tissue, was noted on the anterior neck, just below the manubrium sternum. There were also several puncture wounds and abrasions on the back of the left shoulder, scapula, and chest regions. A puncture wound located immediately below the left clavicle corresponded to a fracture of the clavicle bone. Numerous puncture wounds were present on the left upper limb, with severe lacerations on the left wrist, causing fractures of the left radius and ulnar bones. Rigor mortis was well developed across the body, with post-mortem lividity fixed on the back.

Fig. 1: Injuries over the lateral aspect pf the neck

Internally, corresponding injuries in the neck were noted, including damage to neurovascular bundles and hematoma. These injuries resulted in dislocation of the C5 and C6 vertebrae, along with contusions to the cervical spinal cord. Hematoma was found on the back of the sternum and around the trachea. Fractures of the first and second ribs on the left side were also observed, along with a 1x0.5x0.5 cm laceration to the apex of the left lung, surrounded by a hematoma. Blood and clots were present in the left pleural cavity. All the internal organs appeared pale. The cause of death was determined to be the cumulative effect of multiple injuries, including those to the neck, vertebrae, spinal cord, lungs, and associated fractures.

Fig. 2: Injuries over the anterior aspect of the neck

Discussion

Serious injuries from wild animal attacks, often caused by powerful jaws and grinding teeth, can manifest as soft tissue damage and lacerations. P. K. Singh et al.'s study observed that most patients exhibited injury patterns involving lacerations and soft tissue damage, predominantly in the upper and lower extremities. (5) Similar to our case, injuries occurred in the upper portion of the body. Kirtland et al. and Szleszkowski revealed that big cat attacks result in open cervical spine fractures, severe jugular-carotid injuries, and complex soft tissue wounds to the neck caused by bites. (3, 6) According to studies by Bhandari et al. and Vijapur et al., encounters with wild animals, especially large carnivores such as tigers, can lead to devastating maxillofacial trauma and loss of life. The face is frequently the main target during these attacks, with injuries spanning from damage to soft tissues to extensive skeletal harm[7,8].

This finding aligns with our study, which identified complex injuries in the neck, including cervical spine fractures and involvement of the neck vessels.

Conclusion

Cases of human attacks by large wild cats, such as tigers, leopards, pumas, and lions, are infrequently documented in the medical literature, including forensic reports. This case report illustrates a characteristic pattern of injuries caused by a tiger, with complex bony, neurovascular, and soft tissue trauma affecting the neck and thorax.

Author contributions

All authors played an active role in the design and conception of the study. They contributed to the drafting and refinement of the manuscript, providing critical input at various stages. Each author reviewed and approved the final version, ensuring its accuracy and completeness before submission.

Conflict of interest

The authors have no conflicts of interest to declare.

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None.

Ethical Clearance

Not applicable

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