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Postmortem findings in an accidentally injured spotted deer (*Cervus axis*): A case report

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Abstract

A spotted deer was received from the forest department and upon postmortem examination, various gross lesions, rupture of internal organs and fractures were observed due to traumatic injury.

Keywords: spotted deer, traumatic injury, multiple fractures, rupture of organs, hypovolemic shock

1. Introduction

Chital (*Cervus axis*), also called as Spotted deer, Axis deer or Asiatic deer belonging to the family Cervidae (order Artiodactyla). It lives in the grasslands and forests in India and Srilanka in herds of up to 100 or more [1]. Road traffic accidents are a significant public health problem in a developing country like India and remains one of the most under recognized factors causing harm both to human and animals [2]. The present case study describes various post mortem findings in an accidentally injured spotted deer.

2. Case history and observation

A male spotted deer was presented for postmortem examination. As per case history, the spotted deer was found dead on road side bushes by the forest department people and it was with traumatic injuries. Upon external postmortem examination, the spotted deer was with lacerated open wounds (Fig.1), fractures (Fig.2), frothy hemorrhagic discharges from the nostrils and mouth (Fig.3) and open type of injury on the head (Fig.4).



Fig 1: Lacerated open wounds on the body

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Fig 2: Fracture of hind limb



Fig 3: Frothy hemorrhagic discharge from nostrils and mouth



Fig 4: Open type of injury on head

3. Materials and methods

Internal postmortem examination was conducted and various gross lesions were recorded in different internal organs. For histopathological examination, small tissue pieces were collected in 10% Formalin. These tissue pieces were processed by paraffin embedding technique and tissue sections of 4-5 microns were prepared by microtome. These tissue sections were stained by standard Hematoxylin and Eosin method [3]. While doing postmortem examination, impression smears were taken from different organs and these impression smears were air dried and Giemsa staining was done [4].

4. Results and Discussion

While doing the internal postmortem examination, subcutaneous hemorrhagic patches were recorded (Fig.5). Multiple fractures were observed with small fragments of bones (Fig.6). Lungs were ruptured (Fig.7) and endocardial hemorrhages were found (Fig.8). In the kidney, echymotic hemorrhages (Fig.9) were noticed along with rupture (Fig.10). Rupture of liver (Fig.11) was recorded along with rupture of spleen (Fig.12). Rupture of various internal organs and multiple fractures indicating traumatic injury by a vehicle and these lacerated wounds might be due to falling in to bushes after vehicle collision.



Fig 5: Sub cutaneous hemorrhagic patches.



Fig 6: Multiple fractures with small fragments of bones



Fig 7: Rupture of lungs

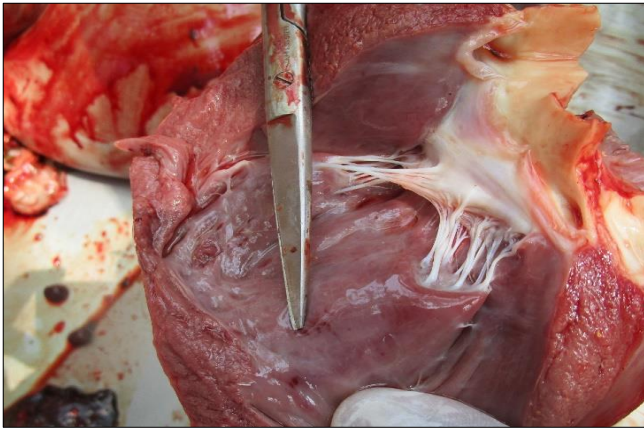


Fig 8: Endocardial hemorrhages



Fig 12: Rupture of spleen

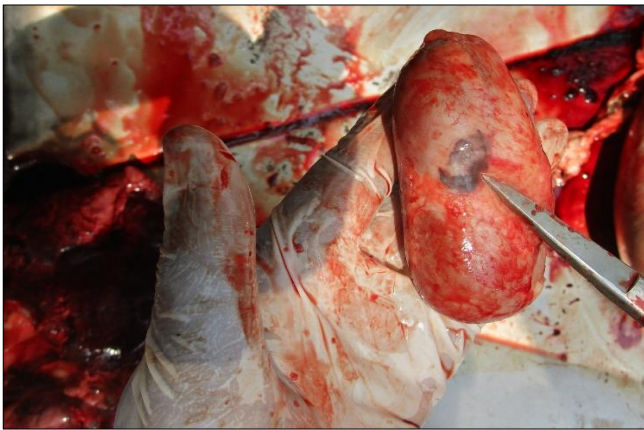


Fig 9: Ecchymotic hemorrhages in the kidney



Fig 10: Rupture of kidney

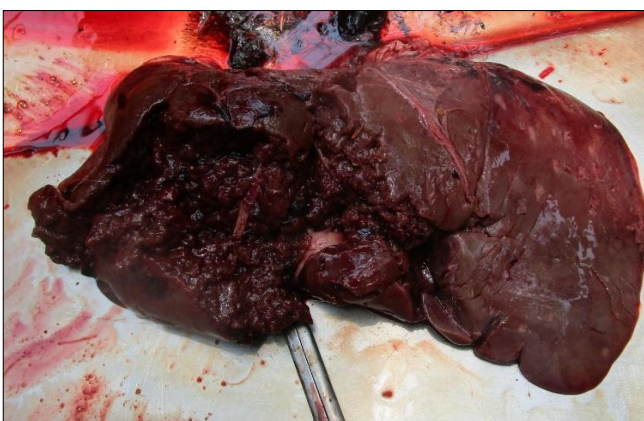


Fig 11: Rupture of liver

5. Conclusion

Even though external postmortem examination revealed only lacerated open wounds and fractures, while doing internal postmortem examination, more damage was noticed with rupture of various internal organs and multiple fractures which ultimately lead to hypovolemic shock and death of the spotted deer.

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