A case of Head injury in a wild boar - a case report

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Brain trauma is one of the major causes of mortality in humans, however, relatively little has been written on the subject in veterinary literature. Contusion of either brain or spinal cord causes primary mechanical damage to the central nervous system and incites an inflammatory response (Olby & Jeffery 1985). A case of trauma to the brain leading to fatal cerebral haemorrhage in a wild boar and its treatment is reported here.

A female wild boar of approximately 2 years of age was brought to the Teaching Veterinary Clinical Service Complex, Pookot, Wayanad, Kerala, by forest officials, with the history that the animal was found hanging in a school compound with a metal chain, winding around its right hock region. There was profuse nasal bleeding. The animal was not taking any food and water and was unable to bear weight on its limbs.

Clinical examination of the animal revealed that there was a depression in the nasal bone leading to fracture and showed severe pain on palpation of forehead. With moist cotton, the nasal cavity was cleaned. The bleeding was controlled by giving injection Ethamsylate 2ml (Saf Fermion pharma) intravenously. The respiration, pulse and, temperature were 48/min, 55/min, 99°F respectively. The wound in the hock region was cleaned with 2% potassium permanganate lotion and painted with Tr.Iodine. The animal was administered 500mg of Amoxicillin (Intamox 500mg, Intas Pharma), 0.5ml tetanus toxoid (Biological E Pharma) and 0.5ml analgin (Aventis Pharma) intramuscularly.

The animal did not show much improvement on the next day. Nasal bleeding was persisting and the animal was anorectic. The respiration, pulse and, temperature did not show much variation. The animal started showing periodic epileptic seizures suggestive of increase in intracranial pressure. Injection frusemide 2ml (Lasix, Aventis Pharma) was given intramuscularly to reduce intracranial pressure due to cerebral oedema as intravenous administration of mannitol was not possible. The same treatment was continued for the next four days and amoxicillin 500mg was repeated at 12 hour intervals. On the third day nasal bleeding was reduced considerably but periodic seizures and anorexia still persisted. Auscultation of chest area revealed moist rales suggestive of aspiration pneumonia. Injection Deriphyllin 2ml (German remedies) was given intramuscularly along with the same treatment as the previous day.

On the fifth day the animal started taking a little quantity of water and the same treatment was continued for the next two days. Even though the animal started showing some improvement, on the eighth day it succumbed to its injury.

Post mortem findings

Post mortem revealed a fracture of the nasal bone measuring about 3cm length and 2cm breadth and there were severe haemorrhage in the meninges. Histopathology of the brain tissue revealed severe congestion of cerebral arterioles and venules in the meninges and cerebral cortex (Image 1). There was moderate to severe haemorrhage in the cerebral cortex and meninges were noted.

Discussion

Nasal bleeding is one of the major signs of internal trauma and haemorrhage may be extradural, subdural, subarachnoid, and intraventricular or intraparenchymal (Venugopalan 1994). In the present case, the haemorrhage was in to the subdural space, which compresses the surrounding tissue and incites an inflammatory response. Modern diagnostic techniques like Computed Tomography and Magnetic Resonance Imaging are needed for prompt diagnosis and timely treatment of such conditions.

References:

Olby, N. & N. Jeffry (1985). Pathogenesis of Diseases of the Central Nervous System. In: Slatter (ed.). *Text Book of Small Animal Surgery*, 3rd Edition, WB Saunders Company, Philadelphia, 1136pp. Venugopalan, A. (1994). Control of Haemorrhage, pp.436-439. In: *Essentials of Veterinary Surgery*, 7th Edition. Oxford and IBH Publishing Company, NewDelhi.

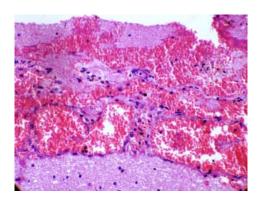


Image 1. Severe vascular engorgement and haemorrhage in meninges and cerebral cortex H&E X 400

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