ENTEROTOXAEMIA IN CHEETAL AND CHAUSINGHA

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Enterotoxaemia is a common bacterial disease of healthy domestic and wild animals. The clostridial toxaemia usually develops following overeating, particularly after the onset of monsoon. Overeating of green pasture causes atony of rumen and ileum, thus creating an ideal anaerobic environment for the growth of enterotoxaemia causing clostridia. The toxins produced by these organisms in turn are absorbed in the gut and usually proves fatal. This type of toxaemia occurs mostly in peracute form. The animals graze normally during the day time and are found dead the next day. The enterotoxaemia is mainly considered to be a disease complex of sheep but has also been reported in other domestic and wild animals from time to time.

Sudden death in Artiodactylids comprising Chausingha (2) and Cheetal (2) was recorded in the Zoological Park of Jaipur. The animals were in sound health and grazed normally and were also stall fed. Green pasture was provided for feeding. In separate instances these wild captive animals were found dead the following morning. There was no complaint of illness and the only sign of any apparent illness was the soiling of back of animal with loose faeces.

Postmortem examination was carried out to acertain the cause of sudden death. The incision at midline revealed severe congestion of abdominal visceral organs. There was a marked ballooning of small and large intestines. The stomach was completely filled with green fodder and was severely congested. The intestinal mucosa showed severe congestion and accumulation of clear mucus and gas. No significant amount of semi-digested or digested feed could be detected in intestines. Kidney, liver and spleen were severely congested. Urinary bladder was found empty. The thoracic cavity revealed the presence of a slight pinkish coloured fluid, congestion of lungs and mycardium. The diaphragmatic wall showed congestion perhaps incluced by excessive ruminal pressure. The microscopic examination of gram stained impression smears from different organs failed to reveal the presence of any bacterial agent. The intestinal contents consisting mainly of fluid and some partially digested feed material were collected in sterile glass vials in ice. Five ml. of intestinal contents were centrifuged at 3000 rpm for 30 minutes and the supernatant was subjected to pass through membrane syringe filter to get rid of any bacteria in supernatant. Each filterate was inoculated in two swiss albino mice intravenously (in tail vein) in 0.2ml. amounts. The mice were kept under observation and mortality was recorded within 4-6 hrs. of inoculation. The death in mice was suggestive of the presence of toxin in the intestinal contents. Further identification of the toxin by neutralisation test could not be carried out.

The incidences of various types of clostridial infection has been reported in wildlife from time to time. Parihar *et al.* (1981) reported *Clostridium perfringens* type D enterotoxaemia in Giraffe. Arora (1987) recorded haemorrhagic enteritis caused by *Clostridium perfringes* type C in a fawn. Arora also reported enterotoxaemia in Sloth Bears due to type C (Arora, 1981-84) and type D (Arora, 1991). Rao *et al.* (1988) recorded enterotoxaemia type C in Brown Bear.

The clinical symptoms, necropsy findings and laboratory examination of clinical material were suggestive of enterotoxaemia in captive Chausingha and Cheetal.

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