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Intestinal Rupture in a Free-living Sambar Deer (*Cervus unicolor*) in India

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Rupture of the intestine is not a common occurrence in animals and has not been reported in free-ranging wild animals. Causes of intestinal rupture in domestic animals include foreign body penetration, abscess, intussusception and herniation (Runnells et al., 1960, Principles of Veterinary Pathology, Iowa State Univ. Press, Ames, Iowa, pp. 565-664). This case of rupture of the small intestine of a sambar deer was discovered at necropsy on 15 December 1984 near Kisli village in Kanha National Park, Madhya Pradesh, India.

The adult female sambar deer was found a few hours after death in mixed deciduous jungle on a moderate slope. No evidence of predation was apparent, and the area vegetation was not disturbed. Tiger (*Felis tigris*), leopard (*Felis panthera*), jackal (*Canis aureus*), and wild dog (*Cuon dukhunensis*) inhabit the area. An accumulation of feces at the rectum and few pellets on the ground indicated a period of immobility. A large quantity of fluid had drained from the mouth. Slight discoloration of the perineal area was observed.

The abdominal cavity was distended with a green watery fluid mixed with ingesta. The serosa and mesentery of most of the small and large intestine was hyperemic with ingesta adherent. The intestine was searched thoroughly and a 1.5cm rupture was detected 10 cm from the pylorus. The edges of the rupture were hyperemic and edematous with ingesta adhered to part of it. No foreign body was detected in the digestive tract. The rumen and reticulum were full of ingesta. Peritonitis was evident, but unevenly distributed with most of the involvement adjacent to the ruptured area.

The uterus contained a nearly fully developed male fetus. The lungs, liver and kidney were congested and slightly inflamed and the heart was normal. The sambar was in excellent physical condition and was graded an 8 prior to necropsy (Franzmann, 1977, Proc. N. Am. Moose Conf. Workshop 13: 119–127). At necropsy the skinned carcass had heavy subcutaneous, peritoneal, cardiac and kidney fat deposits.

Death resulted from intestinal rupture which led to acute peritonitis, probable septicemia, and shock. The predisposing factors to the rupture are unknown, but could include: ulceration, infection, contusion (external), parasitic inflammation or other factors that could weaken the intestinal wall. It should be noted that the animal had a full rumen and a fully developed fetus. The intra-abdominal pressure was likely greater than normal and this in addition to strenuous activity (predator avoidance) cannot be ignored as a possible contributing factor.

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