

Chakraborty (1998) reported death in a 16 year old Himalayan Black Bear due to perforated ulcer at the lower part of oesophagus near cardiac end. *Candida* sp. was isolated from the gastric contents. Jubb *et al.* (1985) opined that the stress of confinement may play a major role in the development of ulcer and the candida which is an obligatory saprophyte is considered as opportunistic invader of gastrointestinal tract. In the present case also, this could be the reason for ulcer formation.

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NOTE

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MASS MORTALITY IN PEAFOWL (*PAVO CRISTATUS*) DUE TO HEAT STROKE IN FAMINE AFFECTED AREAS OF RAJASTHAN

P.K. Mehrotra

Officer-in-charge (Associate Professor - Veterinary Microbiology), Apex Centre (Animal Disease Investigation, Monitoring and Surveillance Centre), A.R.S. Durgapura, Jaipur, Rajasthan, India.

Heat stroke in animals is caused by prolonged exposure to excessive heat and humidity. Animals that move in hot sun experience fatigue. Lack of drinking water is also a predisposing factor. Excessive feathers in birds like kite, vultures, peafowl are additional factors in heat absorption. Birds lack sweat glands

and the only means of cooling off is by rapid respiration with their mouth open and their wings spread, which also leads to loss of body water.

In the present case, mass mortality in peafowls was reported from villages of Churu District, in the desert part of Rajasthan State. This place experiences extreme climatic conditions during winter and summer seasons. In the month of May 2000 during extreme drought, villagers in this area observed several carcasses of peafowls under barren trees. There was no water source for miles and feed material was also scarce. On the particular day of mass mortality, the day temperature was 46°C with high velocity hot winds. Human occupants had already deserted all nearby villages as they had migrated with livestock to greener pastures in nearby states. Non-availability of water, scarcity of food, heat wave and high temperature led to mortality in peafowls enmasse. People in the villages have a tradition of placing water in earthen pots and spread grains for birds to feed in front of their houses. But due to migration of the villagers, the birds were starved for water and food.

Case history

Within a period of 2-3 days, 89 peafowl carcasses were found scattered in and around areas of 4km² of sand dunes. During the period of five days a total of 120 peafowls, two kites and scores of crows were found dead. The carcasses of few peafowls were brought to this centre for examination in the laboratory within 8-10 hours of death. On necropsy, dehydrated musculature, several congestion of visceral organs, degeneration of liver and kidneys were found. The intestines were empty and collapsed. Marked thickening of the adrenal gland was recorded. Lungs showed severe congestion and trachea had exudate. As per observations of the villagers, a few birds fell from the trees and some birds were found lying barely alive on the sand dunes. These birds were sprinkled with cold water and given therapy i.e. inoculation of normal saline solution drip, placing of glucose-salt water mixture for drinking. This treatment could save a few birds. The cultural examination of body fluids and visceral organs in bacteria fungal culture media failed to reveal the presence of any pathogenic bacteria. Absence of any inclusion / elementary bodies in stained smears suggested the absence of viral / mycoplasma infection. These observations are in close conformity to the reports of heat stroke or sunstroke by Udall (1964).

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