

NEOPLASMS IN CAPTIVE WILD MAMMALS- CASE REPORTS

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The general impression is that neoplasms are not common in wild mammals, though there is no premise or veracity in this statement. Different types of tumours have been reported in a variety of wild mammals in the country (Sivadas *et al.*, 1969; Arora, 1982). The present paper reports further cases of neoplasms encountered in various species of wild mammals during our wildlife health monitoring and disease surveillance pursuits.

CASE-I On 18-6-1979 a male tiger (*Panthera tigris*) died at National Zoological Park, New Delhi. History indicated that the beast had at times bleeding from mouth due to some problem in its oral cavity. Its physical condition progressively deteriorated and eventually the animal died. Zoo veterinarian, on necropsy examination, found enlarged and swollen reddish posterior part of tongue and perceived it to be the main cause of its death. Pieces of the tissue from swollen part of tongue fixed in 10% formalin examined histopathologically. The finding revealed it to be a case of squamous cell carcinoma. This neoplasm has been reported from the oral cavity in bear (*Ursus thibetanus*) (Rajan *et al.*, 1973) and lynx (*Felis lynx canadensis*) (Effron *et al.*, 1977).

CASE-II. A 17-year-old lioness (*Panthera leo*) at Prince of Wales Zoological Garden, Lucknow fell sick and died. The clinical manifestations included anorexia, anaemia and ascites. Necropsy examination revealed thick growths attached to peritoneum and omentum. The ascitic fluid in the abdominal cavity was blood-tinged and slightly viscous. Histological findings on the growths revealed them to be a case of malignant mesothelioma. Such a tumour has been recorded in one, 5 year old female nilgai (*Boselaphus tragocamelus*) died at Nandan Kanan Zoo, Orissa (Rao *et al.*, 1981).

CASE-III. Tumorous enlargements of lymph glands in one 15 years old gnu (*Gnnochaetus taurinus*) which died of bronchopneumonia at National Zoological Park, Hyderabad were found to be due to histiocytic cell sarcoma. Report of histiocytic cell sarcoma in this species was not traceable in the available literature.

CASE-IV. The animal under study was a female rhinoceros (*Rhinoceros unicornis*) that died at the age of about 50 years at National Zoological Park, Delhi. Based on the signs of senility and history of a relatively long period of captivity, death was attributed to its old age. Earlier the maximum life span of 47 years of a rhino died at Zoological Garden, Calcutta had been recorded from by Sanyal (1892). The hard tissue mass of about 2 kg recovered from the uterus of this animal was diagnosed to be a fibroma. Occurrence of fibromas in captive wild mammals is rather uncommon.

CASE-V. An adult female hog deer (*Axis porcinus*) with complaint of persistent vaginal bleeding died at Prince of Wales Zoological Garden, Lucknow. Necropsy examination revealed a mass weighing about 544 g attached to the uterus and encompassing the oviduct. It was pulpy (necrotic) in the centre and little gritty at places indicating calcification. Both these facts were borne out on histopathological examination. It was diagnosed as a case of adenocarcinoma suggestive of uterine origin and hydrosalpinx.

Adenocarcinoma of uterus and its metastasis to peritoneum, liver and lungs in a fallow deer (*Dama dama*) have been described (Appleby, 1969).

CASE-VI. In kanpur Zoological Park during 1988-89 an adult male sloth bear (*Melursus ursinus*) started losing condition. There were in intermittent episodes of anorexia and indefinite digestive disturbances. Despite palliative treatment, weakness continued and clinically the case was diagnosed for tuberculosis. It was treated with a course of streptomycin and isox forte. The animal died on 20.5.1989. Necropsy examination revealed serosanguineous fluid in the abdominal cavity, thickening of intestine, hard and enlarged liver and nodular lesions in lungs. The microscopic examination revealed the gross changes to be due to adenocarcinomatous lesions affecting the intestine and apparently spreading to the liver and lungs. During 1983 a female Himalayan bear (*Selenarctos thibetanus*), which had died in this very zoo, had evidenced tumorous growths in the stomach and its metastases to other Visceral organs.

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