

Short Communication

ORAL PAPILLOMA AND MUCINOUS ADENOMA OF THE STOMACH IN AN AFRICAN BABOON (*Papio cynocephalus*)

An adult African Baboon aged about 28 years belonging to the State Zoo, Trichur died after remaining anorectic for a couple of days. The animal had occasional vomition after ingestion of feed and had consumed only very little quantity of feed for a few weeks before death.

A detailed post-mortem examination was conducted. The animal was found to be extremely emaciated and anaemic. Greyish white nodules of varying size were found projecting above the labial surface of the upper gum. A few of the nodules were pedunculated. Cauliflower like growth, completely encircling and covering the central incisors, was also seen. The contact surface of the second incisors had a pitted appearance and the gum around was thickened showing abrasions. The upper lip over the lesion was retracted and partially everted exposing the labia and the gum. The nodules were hard and the cut surface was pale. The stomach appeared as a hard mass with irregular surface. Sleeve like thickening and growth projecting into the lumen was seen on the mucosa. The growth was smooth, and extensive leaving the lumen in the form of an irregular fissure. The stomach wall was thick, very firm and rigid. The growth appeared hard at the fundic region. The oesophageal opening into the stomach remained moderately stenosed. The mucosa of the intestine was extremely pale. The

lumen was free of any ingesta. The rectum contained a few pellets of faecal material. Moderate enlargement, focal areas of suppuration, greyish streaks of necrosis and diffuse petechiae were observed in the liver. The gall bladder was distended with greenish, slimy bile. There was congestion and necrosis of the pancreas. Both the kidneys appeared swollen and pulp with diffuse haemorrhage and corticomedullary congestion. Heart was extremely dilated. Collapse of the mediastinal and left apical lobe, anthracosis and focal emphysema were the lesions observed in the lung. The testes were moderately enlarged. Gross lesions were not observed in the spleen and lymphnodes.

Histopathological examination of the gum nodules revealed papillomatous growths with proliferation of the stratum spinosum. The proliferating epithelium extended deep into the connective tissue, and in some regions it was interconnected, forming networks enclosing capillaries and narrow connective tissue cores (Fig. 1). Close to and between the papillary processes, clumps of hyperchromatic and spindle shaped cells were seen. The proliferating prickly cells were longer and darker staining than the normal. The dermal connective tissue reaction was extensive and the layer appeared extremely thick. Mild infiltration of inflammatory cells was seen in the dermis beneath the tumour.

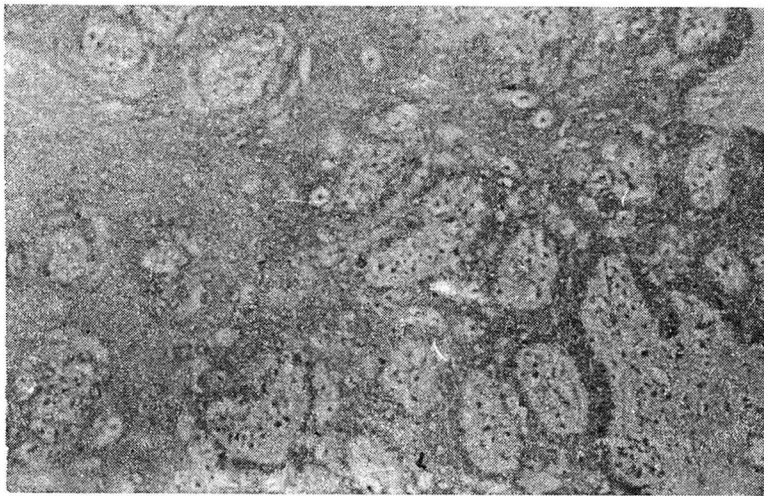


Fig. 1 Oral papilloma: Papillomatous proliferation of stratum spinosum. Proliferating epithelium enclosing capillaries and narrow connective tissue core. H&E 160 x

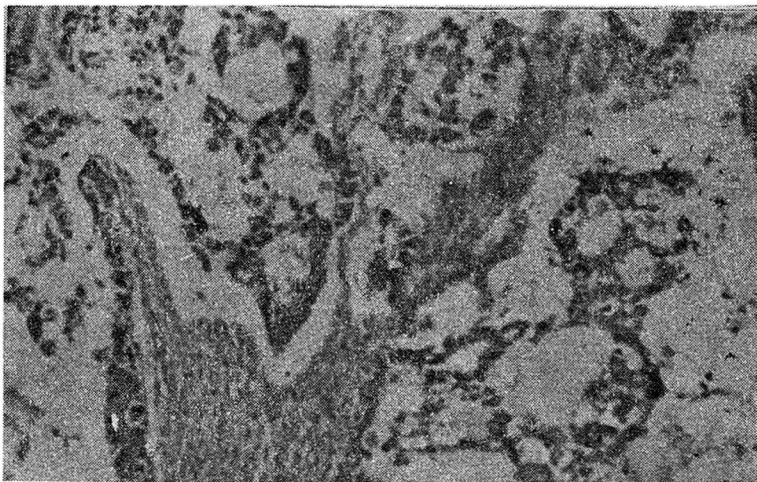


Fig. 2 Stomach - Mucinous adenoma: Clumps of proliferating cells amidst mucinous matrix. H&E x 250 x

The stomach lesions had the histological appearance of a mucinous adenoma. There was flattening of the surface gastric pits and furrows. The lining of the mucosa appeared discontinuous and contained occasional clumps of tall columnar cells. There was

glandular proliferation in the lamina propria. Most of the glands were highly distended containing lightly stained basophilic material and were separated by loose strands of collagenous and elastic fibres. A few of the glands were cystic. The basement membrane

of the glands appeared intact and there was no infiltration of cells into the surrounding tissue. In some glands nuclear clumps were seen in the centre, amidst mucus, due to displacement. Mitotic figures were observed in a few of the cells. Individually separated cells were also seen in a mucinous matrix between the connective tissue core (Fig.2). In the fundic region there was extensive thickening of the lamina propria due to increased collagen and elastic fibres. Thrombosis of the gastric vessels and perivascular neutrophilic infiltration were also observed.

There was chronic nephritis characterized by focal intertubular fibrosis, tubular and glomerular necrosis, atrophy of the glomeruli, hyalinisation of the tubules, vascular sclerosis and thrombosis. Congestion of the central vein and sinusoids and extensive fatty change were observed in the liver. Pancreatic islet cells were necrotic. Congestion, connective tissue proliferation and separation of muscle fibres were seen in the heart. Lungs revealed emphysema and anthracosis. Degeneration was evident in the testis.

Most of the tumours reported in wildlife occurred in the liver, lung and uterus and the available literature did not reveal any occurrence of a concomitant neoplasia in the wild animals. In the case reported the tumours occurred simultaneously in the mouth and in the stomach. Tumours have been reported in non human primates and the one which is reported from India was a

gastric carcinoma in a monkey (James, 1972) and there are no report on the occurrence of tumours in African Baboon anywhere from India. The mass of the tumour which filled the stomach without any tendency for malignant transformation points to the possibility that this was probably initiated by chronic irritative response to parasitic larvae at some stage. But there was no evidence of any parasite in the gastric glands. The tumour, which filled the lumen of the stomach caused starvation and death.

Summary

A case of oral papilloma and mucinous adenoma of the stomach in African Baboon (*Papio cynocephalus*) is placed on record.

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Acknowledgement

The authors thank Dr. A. Rajan, Dean and Dr. K.V. Valsala for their help.

Reference

James, C. (1972). Gastric carcinoma in a monkey - A case report. *Orissa Vet. J.* 7(4): 159-160

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