A CASE OF EAR TUMOR OF WHITE BENGAL TIGER
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Clinical History
Animal: White Bengal Tiger
Age: 22 year
Sex: Male

Since 1 year ago, the tiger was noticed to have a subcutaneous tumor mass at its left ear. The nodule was growing bigger and bigger until the size of 10 x 15 x 5 cm. Recently, some small tumor masses were also noticed near the left eye, right ear and dorsal of the head. Signs of loss appetite and lethargy were observed and finally refused to eat for the last 1 week. The tiger then was euthanized with pentobarbital.

Gross lesion
Beside the large cutaneous tumor growth at the left ear, there were some small nodules observed within right ear (4 x 2 x 2 cm), at canthus media of the left eye (1 x 1 x 0.5 cm) and at skin of dorsal of the head (3 x 4 x 3 cm). Two white small tumor nodules were also observed in lungs (7 x 15 x 1 cm) and pancreas (1 x 0.5 x 0.5 cm) examination. The lungs were affected by pleuropneumonia, microcalcification and anthracosis. On opening the digestive tract, there were catarrhal gastroenteritis and few numbers of cestodes and nematodes. The gall bladder contains sand like cholelith. Both kidneys had interstitial nephritis and sand like uricules in the pyelum. Accumulated lymphatic fluid was found in the uterine and urinary bladder. Both hip joints had chronic arthritis.

Histopathological Findings
The largest ear tumors mass was observed under the skin epithelium, expand into the dermis and protrude to the skin surface, caused skin epidermis become eroded. The mass was circumscribed, surrounded by collagen stroma. Multilocular granulomatous reaction showed within same area of collagen stroma. The tumor was spindle in shape, arrange in herring bone pattern. The mitotic figures were rare. Some area showed chronic inflammatory reaction. Similar tumor pattern were observed in the smaller tumor of the right ear and at the canthus media of the left eye. Small nodule on the skin of head region was composed of whorled fatty tissue suggesting as lipoma. The nearest auricle lymph node showed interstitial collagen necrosis. There was no tumor metastasis observed within this lymph node or other lymph nodes. The nodules observed within lung and pancreas showed different pattern with the tumor of the skin. The nodule of the lung composed of amyloid sedimentation and no tumor cell was identified, while the nodule at the pancreas composed of hyperplastic growth of pancreatic duct. Other organs showed various lesion, such lung emphysemata and anthracoses cardiomopathy with mild steatosis liver passive congestion and hepatocytes dissociation; perivascular edema of the brain, spleen degeneration and congestion while kidney showed severe lesion due to nephrosis pointing toward end stage kidney. The tumor is suggested as neural origin that locally expanding and found in 3 different region of the skin. Further special stain such as histochemistry and immunohistochemistry are set in progress.

Clinical History
A 4 year-old, female, nutria (Myocastor corpus) was depressed and anorexic prior to her death.

Gross Findings
There were numerous variable-sized (ranging from 3 mm to 10 mm in diameter), often coalescent brownish red foci interspersed on the glandular gastric mucosa. These foci were roughened with adherent variable-sized clumps of dark red to black opaque refractive material. In addition, a 7 x 3 x 2 mm exophytic wart-like nodule was noted on the glandular gastric mucosa.

Histopathological Findings
Interspersed yet circumscribed foci of glandular gastric mucosa are eroded. Associated mucosal epithelia are absent, necrotic or degenerate, and the lamina propria is expanded by clumps of yellowish brown irregularly granular material (hemorrhagic). The wart-like nodule is demarcated from adjacent glandular gastric mucosa and composed of anastomosing fronds of squamous epithelium with gradual keratinization. The tumor of the head region was composed of variable-sized clumps of dark red to black opaque refractive material, which are often ulcerated.

Contributor’s Diagnosis
1. Marked multifocal hemorrhagic and edematous process in the tissue
2. Solitary papilloma, 3. Interspersed adenocarcinoma

Discussion
The stomach of rat is equally forestomach. The major role in the stomach is to mix the food with gastric juice and then progress from the stomach to the intestine. The stomach of rodents may have neoplasia due to a variety of dietary changes in diet, compounds, penetrant nematodes, fungal infection, papillomaviruses.