386th CSVP Contributor Diagnosis

Date: Mar 11, 2022

Time: 10 : 30~16 : 00

Place: AHRI

專題演講(10:30~12:00)：病理獸醫師在經濟動物疾病管控上擔任的角色

(李淑慧博士)

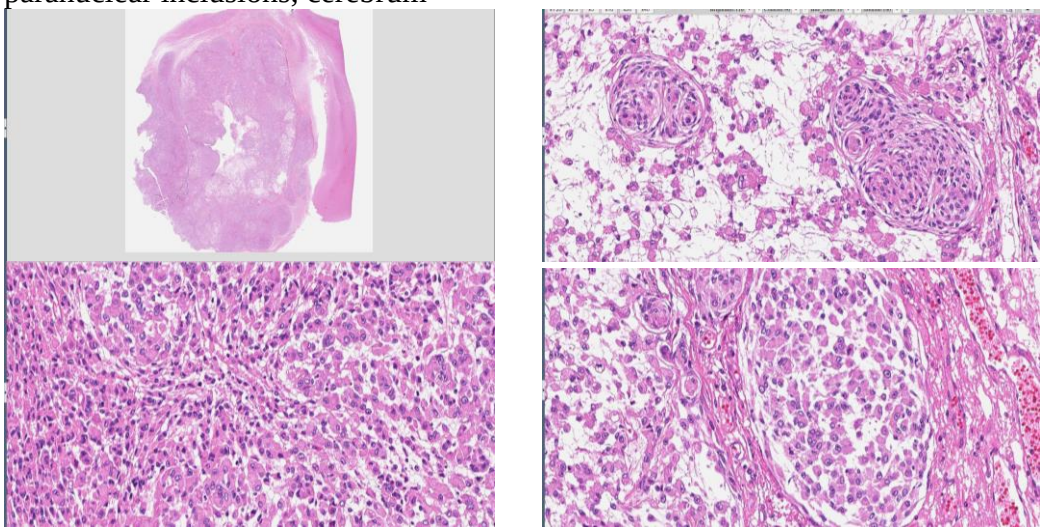
本次會議組織病理切片資訊：http://140.120.114.107/slidecenter.php?id=500

Case 1. CSVP 2022-3128 (NTU2020-0418, NTU GIMCP, T.W. Lee and Y.C. Chang)

Canine, poodle, 11-year-old, spayed female. The first seizure episode was noted in 2018/12. The lesion localization was around Lt. forebrain. Medication control was performed since then. The seizure episode was hard to control if happened. The mentation became more disorientated. Sleep-wake cycles altered. Euthanasia was performed on 2/18, 2020 due to poor life quality.

Morphological diagnosis:

1. Meningioma, rhabdoid type, with eosinophilic cytoplasm, eccentric nuclei, hyaline paranuclear inclusions, cerebrum



2. Adrenal cortical carcinoma, adrenal gland
3. Glomerulosclerosis and glomerular cystic atrophy, segmental, moderate, with mild nephritis, kidney
4. Leiomyoma, uterus
5. Vacuolar degeneration, locally extensive, moderate, with portal fibrosis, liver
6. Emphysema and calcification, lung
7. Extramedullary hematopoiesis, spleen
8. Round cell tumor, with moderate intratumoral mastocytosis, mass at the left thigh

IHC: Iba-1 (+), E-cadherin (+), GFAP (-), PAS (-)

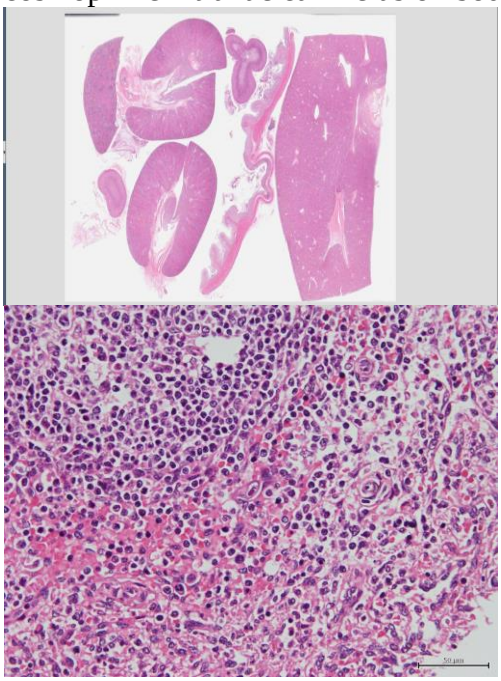
Etiological Dx.: Rhabdoid meningioma, cerebrum in dogs

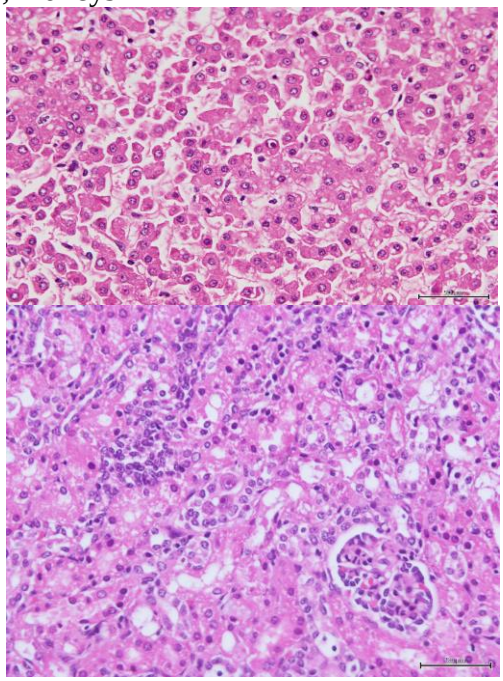
Case 2. CSVP 2022-3129 (CW20-07017, ADDC NCHU, H.Y. Lin, J.W. Liao, and H.Y. Chiou)

Formosan macaque (*Macaca cyclopis*), infant, female, the patient showed body weight loss followed by depression on July, 2020 and icterus was suspected by the attending veterinarian. The patient died after treatment on July 27, 2020.

Morphological diagnosis:

1. Hepatitis, necrotizing, lymphoplasmocytic, multifocal, mild to moderate, subacute, with eosinophilic intranuclear inclusion bodies and vacuolar degeneration, liver
2. Splenitis, multifocal, moderate, with eosinophilic intranuclear inclusion bodies, germinal center, spleen
3. Nephritis, tubulointerstitial, lymphocytic, multifocal, mild, subacute, with eosinophilic intranuclear inclusion bodies, kidneys





Laboratory examinations: Molecular biologic analysis

Specimen: brain, liver, spleen and kidneys

PCR results:

1. Rhesus cytomegalovirus (+) (RhCMV, *Macacine herpesvirus-3* ),
2. Simian cytomegalovirus (-)(SCMV, *Macacine herpesvirus-8* ),
3. Simian herpesvirus (-) (B virus, *Macacine herpesvirus-1* )
4. Adenovirus (-)

Etiological Dx.:

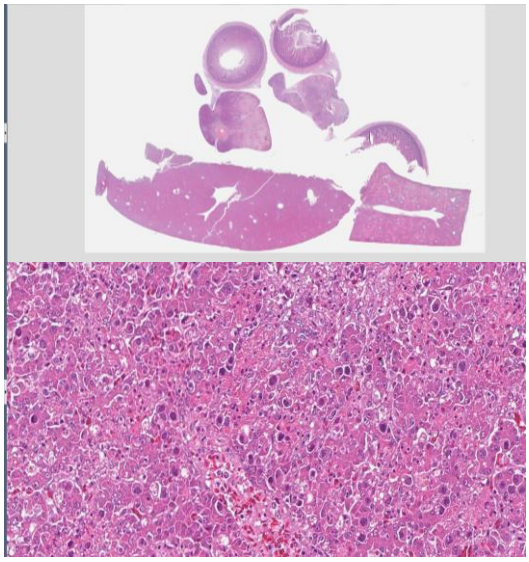
Rhesus Cytomegalovirus Infection in a Formosan Rock Macaque (*Macaca cyclopis*)

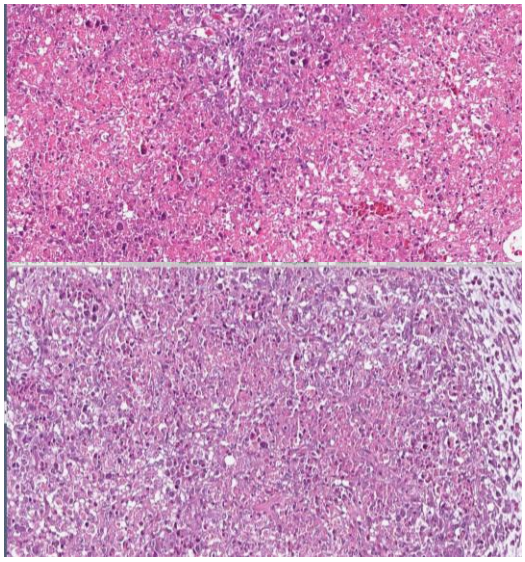
Case 3. CSVP 2022-3130 (CX20028, ADDC NCYU, M. Huang, H.C. Kuo, C.L. Chen, M.H. Chang, and D.Y. Lo)

Broilers, 11-day-old, showed signs of yellow diarrhea and sudden death. The cumulative mortality from 9 to 11-day-old was 4.2 % (470/11,220).

Morphological diagnosis:

1. Hepatitis, necrotizing, massive, acute, severe, with eosinophilic and basophilic intranuclear inclusion body, liver
2. Pancreatitis, necrotizing, locally-extensive, acute, severe, with basophilic intranuclear inclusion body, pancreas





Laboratory examinations:

1. PCR: Fowl adenovirus (FADV)(+)
2. Bacteria isolations: Blood agar and MacConkey agar (-)

Etiological Dx.

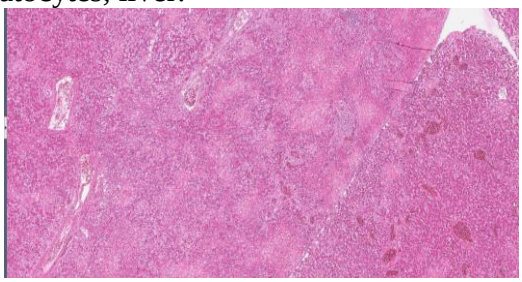
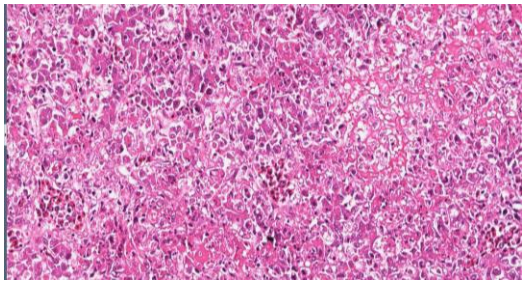
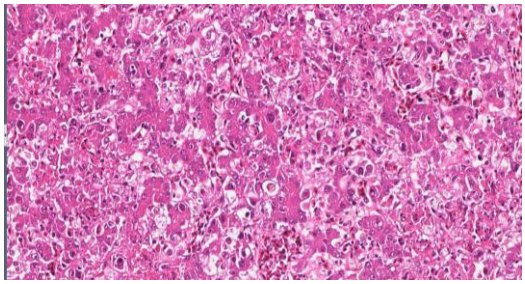
Inclusion Body Hepatitis in Broilers

Case 4. CSVP 2022-3131 (P110-099, NPUST ADCC, J.L. Ku, Y.C. Li, Y.Y. Lien and M.C. Cheng)

Chicken, 4-week-old, showed clinical signs of breathing noises and rales. Lesions of liver and kidney were noted at necropsy. The mortality was 0.8% (30/3,600).

Morphological diagnosis:

1. Hepatitis, necrotizing, moderate, subacute, multifocal, with basophilic intranuclear inclusion bodies and fatty change in hepatocytes, liver.

2. Nephritis, interstitial, moderate, subacute, multifocal, kidney.
3. Tracheitis, mild, subacute, multifocal, trachea.
4. Bronchitis, severe, subacute, multifocal, lung.
5. Pneumonia, bronchial, heterophilic, severe, acute, locally extensive, lung.

Laboratory examinations:

Mix: cerebrum, lung, liver, spleen, kidney

FAdV: fowl adenovirus (+); IB: infectious bronchitis (+), TWI: Taiwan group 1 (+); TWII : Taiwan group 2 (-)

Lung: Escherichia coli (+)

Etiological Dx.

Inclusion Body Hepatitis, Infectious Bronchitis and Secondary *Escherichia coli* Infection in Black Feather Native Chicken

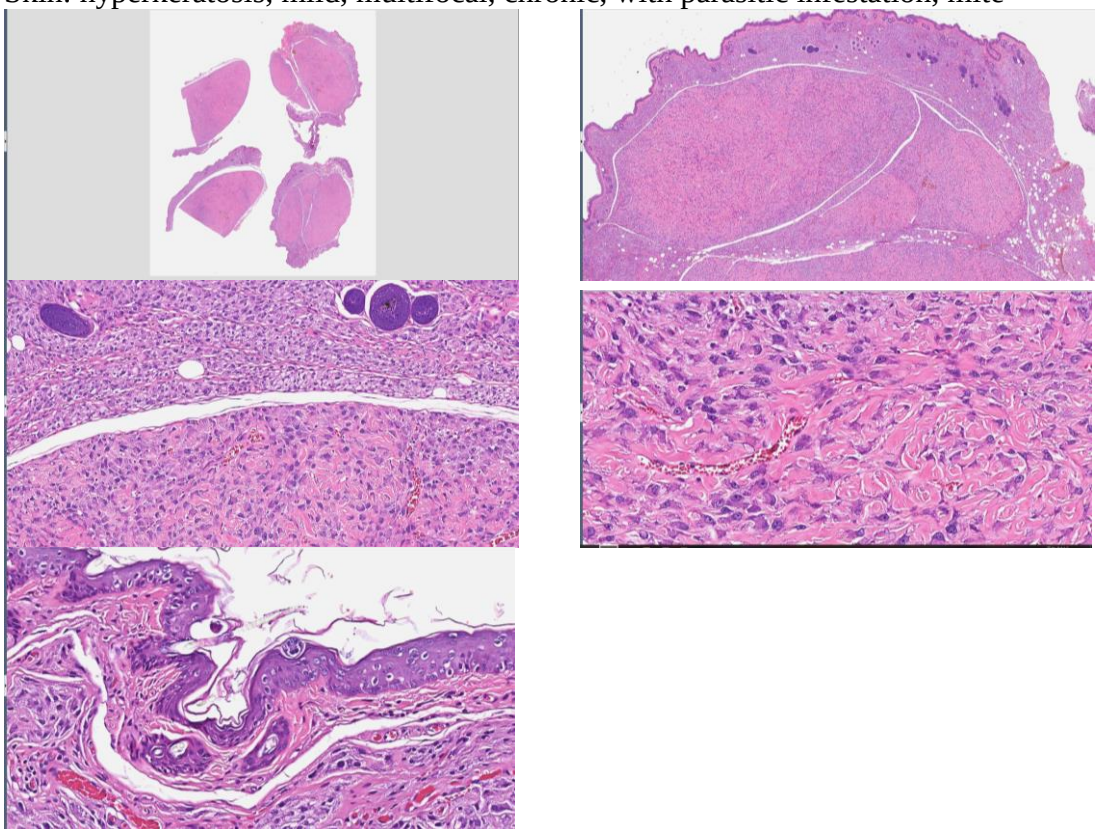
Case 5. CSVP 2022-3132 (2021-S146, Li-Tzung BioTech. INC., H.K. Chang)

Djungarian hamster, 1-year-old, was found to have a firm, rapid growing cutaneous mass on the chest, measuring approximately 1.5 x 0.5 x 0.2 cm. The fine needle aspiration cytology showed a few spindle cells.

Morphological diagnosis:

Mass: tumor cells consisted large ganglion cell-like (GL) and collagen fibers, interlacing bundle, polygonal to angular

Skin: hyperkeratosis, mild, multifocal, chronic, with parasitic infestation, mite



Laboratory examinations:

Masson Trichrome staining, Picro-Sirius Red staining (+);

Vimentin (+++);S-100 (++),SMA (-),GFAP (-)

Androgen Receptor (AR) (+++), Estrogen Receptor (ER) (-)

Collagen 1 (+),Collagen 2 (-),Collagen 4 (++)

Etiological Dx.:

Atypical fibrosarcoma in hamsters

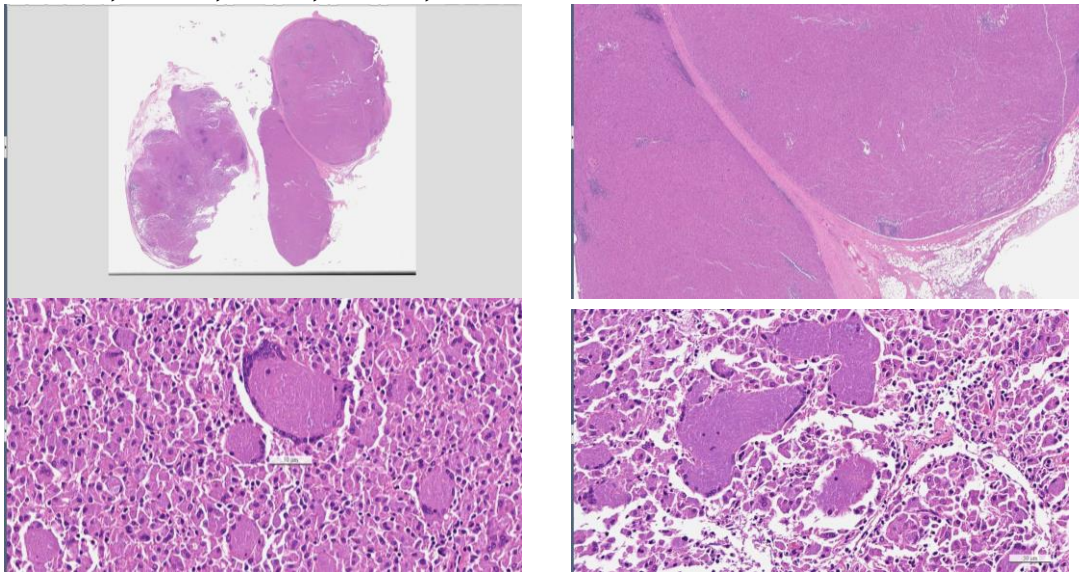
Case 6. CSVP 2022-3133 (2021-0145-8, AHRI, Y.W. Chen, C.S. Huang, Y.C. Tu, W.C. Hsu, S.C. Hu, P.Y. Chang, K.S. Lin and F. Lee)

Leopard cat (*Prionailurus bengalensis*), male, adult. The animal showed weak with a large skin wound on its Lt. ankle. The skin wound revealed failure to heal, and a skin mass was found on its Rt. cheek. Due to the poor prognosis, the animal was euthanized. At necropsy, the skin mass was 3.5 x 3 x 2 cm in size, and had a yellow-to-white, caseous cut surface with central necrosis. The swollen spleen and multiple enlarged lymph nodes were also noted. The submitted slide was taken from the mesenteric lymph nodes.

Cytology (Diff Quik stain):
Extra- and intracellular (macrophages) negative staining rods

Morphological diagnosis:

1. Pyogranulomatous, necrotizing dermatitis, with multinucleated giant cells, intrahistiocytic bacilli, skin
2. Lymphadenitis, macrophage with blue-stained organisms in the multinuclear giant cells, diffuse, severe, chronic, LN



Acid-fast bacilli (AFB) : Intrahistiocytic (macrophages) (+) Length：2-3 μm
Mycobacterium culture: *Mycobacterium avium* subspecies *hominissuis* (MAH) (+)

Etiological Dx.:
Systemic *Mycobacterium avium* subsp. *hominissuis* Infection in a Leopard cat (*Prionailurus bengalensis chinensis*)