390th CSVP Contributor Diagnosis

Date: Oct 14, 2022

Time: 12 : 00~16 : 00

Place: NCHU

專題演講(12:00~13:00):病理獸醫師在基礎研究倫理與實驗室工作品質扮演的角色 與經驗分享(陳彥伯 病理獸醫師)

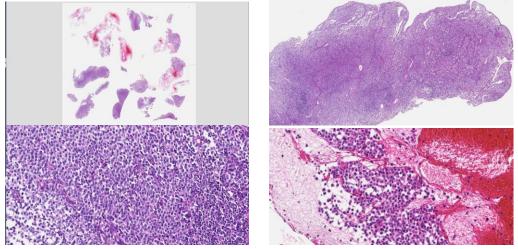
本次會議組織病理切片資訊: <u>http://140.120.114.107/slidecenter.php?id=519</u>

Case 1. CSVP 2022-3152 (NTU21-3676, GIMCP, H.Y. Wang and H.W. Chang)

Canine, mongrel, male, 6-year-old. The dog was adopted about half a year ago. Sneezing with bloody nasal discharge since August 2021. Rhinoscopy was performed on 12/23. An area in left nasal cavity was swollen, white/yellow color, rough mucosa, with clot on the surface. The area was biopsied by biopsy forceps.

Morphological diagnosis:

1. The tumor cells are uniformly round or oval and resemble lymphoblasts (despite their likely histiocytic histogenesis); they are arranged in sheets and sometimes clusters. Their cytologic appearance is diagnostic and is characterized by centrally located, large, oval or round nuclei that contain a single prominent nucleolus and coarsely aggregated chromatin. The cytoplasm is scant, pale blue, and homogeneous or finely granular and may contain vacuoles. Mitotic figures are common. The fibrovascular stroma is scanty early in tumor development and becomes more abundant in older tumors. Lymphocytes and other inflammatory cells infiltrate tumors undergoing spontaneous regression, at which stage individual tumor cells degenerate.



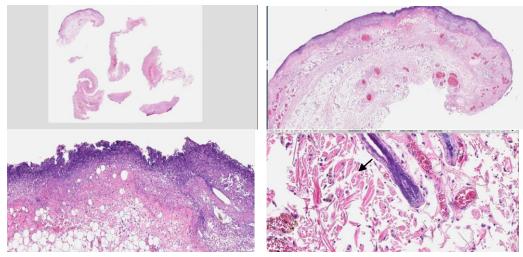
Toluidine blue (-), CK (-) PCR for CTVT- 550bp (+)

Etiological Dx.: Canine Transmissible Venereal Tumor

Case 2. CSVP 2022-3153 (NTU22-1873, GIMCP, Y.J. Chuang and C.S. Liu) Feline, mixed, castrated male, 19-month-old. The cat showed an ulcerative skin wound near the neck which ruptured on May, 2022. New skin wounds with hairless skin were noted at different locations on June, 2022. The skin was thin and fragile, and the wounds repeatedly healed and ruptured under a slow healing process.

Morphological diagnosis:

1. Dermatitis, ulcerative and suppurative, subacute, multifocal, severe, with severe epidermal and dermal atrophy, skin biopsies



Laboratory examinations: Trichrome stain under polarized light (+)

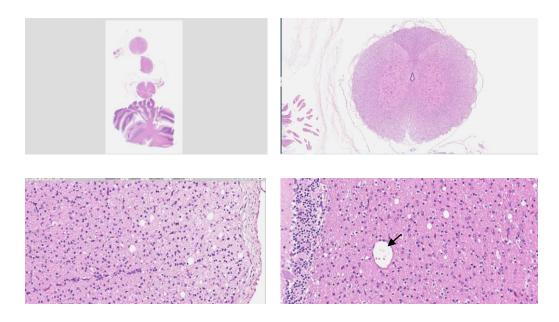
Etiological Dx.: Feline Skin Fragility Syndrome (FSFS)

Case 3. CSVP 2022-3154 (MM22008, ADDC NCYU, T.Y. Chang, N.C. Twu, H.C. Kuo, and D.Y. Lo)

Suckling pigs, 2-day-old, showed clinical signs of tremor and incapability of standing. The total number of sows is about 1,300, including 100 gilts (7.69 %). The sick piglets were born from gilts and the morbidity was about 50%.

Morphological diagnosis:

1. Encephalomyelopathy, necrotizing, white matter, multifocal to coalescing, chronic, with hypomyelination, spinal cord and cerebellum



Laboratory examinations:

RT-PCR: Atypical porcine pestivirus (+); Japanese encephalitis virus (-) PCR: Pseudorabies virus (-)

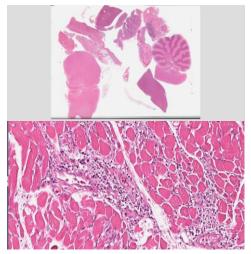
Etiological Dx. Congenital Tremor Type A-II in Suckling Pigs

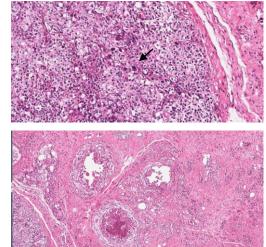
Case 4. CSVP 2022-3155 (P111-129-1-1, ADDC NPUST, Y.H. Hsieh, C.A. Yang, Y.W. Tsai, P.W. Huang, Y.C. Li, and M.C. Cheng)

SA pullet, 50-day-old. Mortality rate was increased after NDIC oil-adjuvant vaccination in 42-day-old. The chicken also exhibited emaciation and depression.

Morphological diagnosis:

- 1. Thymus, bursa of Fabricius and spleen: Lymphoid depletion, severe, with eosinophilic intranuclear inclusion bodies in thymus
- 2. Bone marrow: Hypoplasia, severe, with fatty infiltration
- 3. Liver: Hepatitis, bacterial, multifocal, acute to subacute, severe
- 4. Trachea: Tracheitis, lymphocytic, segmental, subacute, mild
- 5. Lung: Interstitial pneumonia, multifocal, subacute, mild, with peribronchial lymphoid follicle hyperplasia
- 6. Proventriculus: Hemorrhage, multifocal, acute, mild
- 7. Small intestine: Enteritis, bacterial, focal, transmural, subacute, severe, with multifocal perivasculitis
- 8. Pectoral muscle: Myositis, multifocal, subacute, moderate, with skeletal muscle degeneration and acute hemorrhage





Bacterial Isolation: Spleen, liver, gallbladder: *Gallibacterium anatis* (+) Conventional PCR: Thymus, bursa, bone marrow, spleen, lung, kidney Positive: CAV IBD MG MS Negative: IB

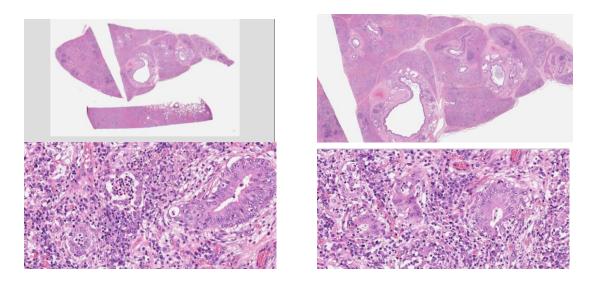
Etiological Dx. Chicken infectious anemia (Chickens are considered only natural hosts of CIAV)

Case 5. CSVP 2022-3156 (2022-0383-4, AU & ADDC, AHRI, Y.T. Chu, T.M. Huang, Y.C. Tu, L.J. Ting, W.C. Hsu, F. Lee, and Y.W. Chen)

Domestic goat (*Capra aegagrus hircus*), female, adult. Necropsy findings revealed all the lung lobes were diffusely dark red and firm. Multiple yellow-to-white, pus-like foci were scattered within the lung parenchyma and bronchioles. The mediastinal lymph nodes were significantly swollen.

Morphological diagnosis:

- 1. Lung: bronchopneumonia, suppurative, diffuse, chronic-active, severe with peribronchiolar lymphoid hyperplasia, pulmonary edema, and intrabronchial fibroblast aggregates.
- 2. Lung: interstitial pneumonia, lymphohistiocytic, diffuse, chronic, moderate to severe with marked type II pneumocyte hyperplasia



PCR: Carprine Arthritis Encephalitis, CAE, lenti virus with mycoplasma, strep (+)

Etiological Dx.:

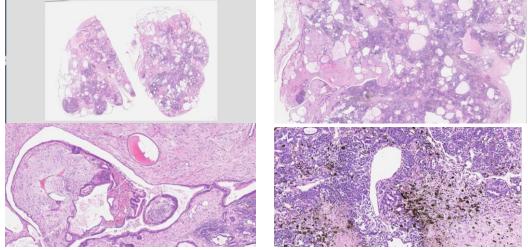
Carprine Arthritis Encephalitis, CAE, lenti virus with mycoplasma, strep (+)

Case 6. CSVP 2022-3157 (CO21-12035C, ADDC/GIVP NCHU, C.C. Yang, P.C. Liu, J.W. Liao, K.T. Chang, and C.Y. Yang)

Mouse, APP/PS1, 5-month-old, female. An enlarged, white and firm mass in the ovarian was incidentally noted at necropsy

Morphological diagnosis:

- 1. The mass was surrounded by a bursa and oviduct. Tumor has cells derived from three germ cell lines.
- 2. Ectodermal (epithelium, including neuroepithelium, melanocytes), Mesodermal (mesenchymal tissue, smooth muscle, collagen, elastin fiber, and cell with waved and elongated nucleus, round chondrocytes), Endodermal: columnar epithelium, pancreatic acini cells, cuboidal thyroid follicles.



Teratomas of the ovary are usually benign in rats and mice.

Malignant teratomas occur less often, and they are usually poorly differentiated with primitive tissue types.

Etiological Dx.: Ovarian teratoma in APP/PS1 mouse