394th CSVP Contributor Diagnosis

Date: Mar 17, 2023 Time: 10: 30~16: 00

Place: AHRI

專題演講(10:30~12:00):實驗室品質管理系統簡介及病理學檢驗之應用(楊程堯

老師)

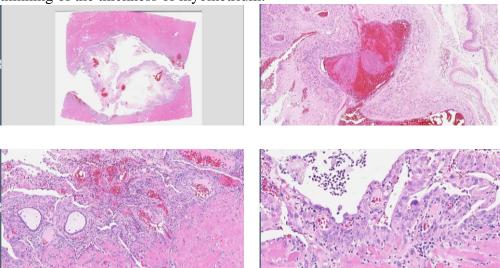
本次會議組織病理切片資訊: http://140.120.114.107/slidecenter.php?id=529

<u>Case 1. CSVP 2023-3176 (NTU2022-1499, NTU GIMCP, F.H. Yang and Y.C. Chang)</u>

Pongo pygmaeus 婆羅洲猩猩, 25-year-old, intact female. After laboring, the animal showed poor appetite and no placenta was discharged. Considering patient's age, ovariohysterectomy was performed on the second day after laboring.

Morphological diagnosis:

1. Uterus: Partial retention of the placenta after the time of delivery, Chorionic villi in direct contact with myometrium without decidua. There is only superficial thinning of the thickness of myometrium.



Etiological Dx.:

Placenta accreta with necrotizing choriodeciduitis, retained placenta in an *Pongo* pygmaeus

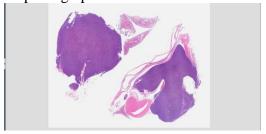
<u>Case 2. CSVP 2023-3177 (CO22-04058, ADDC NCHU, C.Y. Tsai, H.Y. Chiou, and J.W. Liao)</u>

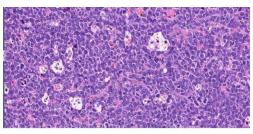
Mouse, NOD/SCID strain, female, 5-month-old. This mouse was retired with no experimental history before. Signs of dyspnea and decrease activity were observed in clinic. After euthanasia and necropsy, hydrothorax and a thoracic mass were noted.

Morphological diagnosis:

Mass:

- At low magnification, the mass is unencapsulated and no demarcation from the surrounding tissue is observed. The neoplastic cells are round-cell arranged in sheet-pattern. The "starry-sky" pattern representing numerous tingible body macrophage is noted.
- 2. The neoplastic cells are round to polygonal, with abundant eosinophilic cytoplasm. The nuclei are large and central-located, round- to irregular-shaped, hyperchromatic with chromatic margination. Binucleation or bizarre nuclei are occasionally observed. A central nucleoli is presented in the nuclei. Anisocytosis and anisokaryosis are prominent, and the mitotic figures are numerous, exceeding 20 per high power field.





Laboratory examinations:

IHC:

Marker	Target	Result
CD3	T cell differentiation	++
CD4	Helper T cell	+++
CD8	Cytotoxic T cell	+++
CK	Epithelial differentiation	-
PAX5	B cell differentiation	
Caspase-3	Apoptosis	+++

Etiological Dx.:

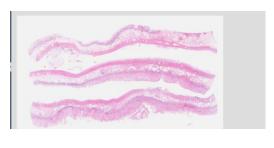
Precursor T-cell lymphoblastic lymphoma (Pre-T LBL, thymic lymphoma) in a NOD/SCID mouse

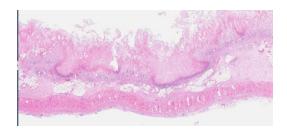
Case 3. CSVP 2023-3178 (CI22002, ADDC NCYU, S.C. Lin, H.C. Kuo, C.L. Chen, M.H. Chang, and D.Y. Lo)

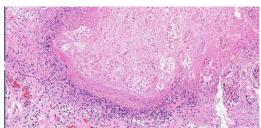
Growing pig, 60-70 Kg, showed signs of sudden death and bloody dysentery for one week. The cumulative mortality was 0.7% (5/700).

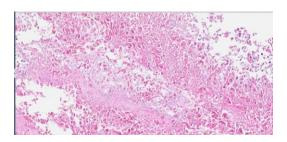
Morphological diagnosis:

Colon: Colitis, ulcerative and hemorrhagic, diffuse, severe, acute









Laboratory examinations:

Warthin starry stain: Colon (+);

Bact: Salmonella spp. (-); Brachyspira spp. suspected

PCR: Brachyspira hyodysenteriae: (+); Lawsonia intracellularis: (-)

Etiological Dx.

Swine Dysentery in Growing Pigs

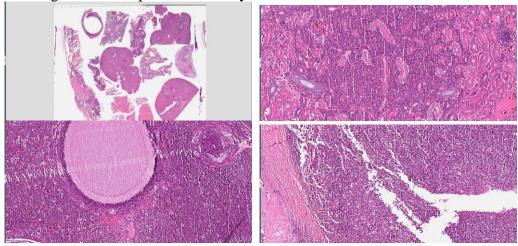
<u>Case 4. CSVP 2023-3179 (P111-154, ADDC NPUST, S.M. Cho, C.A. Yang, H.H. Lee, and Y.C. Li)</u>

Layers, 32-week-old, showed clinical signs of sudden death and decrease in egg production rate and total feed intake. The mortality was about 0.05%.

Morphological diagnosis:

1. Myelocytomatosis, thymus, liver, ovary, spleen, bone, and bone marrow

2. Hemangiosarcoma, spleen and kidney



Laboratory examinations:

PCR: Leukosis Virus subgroup J (ALV-J) (+)

Etiological Dx.

Avian Leukosis Virus Subgroup J in Layers

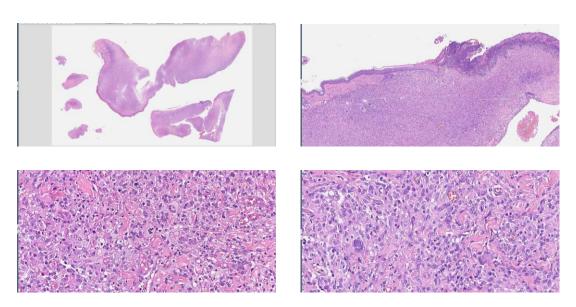
Case 5. CSVP 2023-3180 (2022-S850, Li-Tzung BioTech. INC., H.K. Chang, W.R. Hsieh, and H.C. Lin)

Feline, 14-year-old, mongrel, castrated male. On December 08, 2022, a swollen nose of the cat was noted and the cat didn't respond well to medication. A subcutaneous mass with ulceration and hemorrhage on the left forelimb was noted 2 weeks later. The cutaneous masses of nose and forelimb were sampled by punch and then sent for histopathological diagnosis.

Morphological diagnosis:

Skin:

- Storiform-pleomorphic: fibroblast-like cells are arranged in cartwheel (storiform) patterns, mixed with histiocytoid cells and an infiltrate of lymphocytes, plasma cells, neutrophils, and occasional eosinophils. Histiocytoid cells are frequently karyomegalic or multinucleated, often with marked nuclear atypia. Some tumors have patchy zones of sclerotic collagenous stroma.
- 2. Giant cell: Numerous **m**ultinucleated giant cells mixed with spindle cells and mononuclear histiocytoid cells



Laboratory examinations:

IHC: IBA-1: +++; CD68: +; CD117: +/-; Ki-67: +++; E-Cadherin: ++

Giemsa & Toluidine blue: few mast cells

PAS stain: few positive granules

Etiological Dx.:

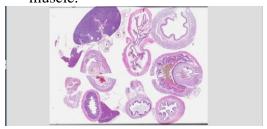
Feline progressive histiocytosis

Case 6. CSVP 2023-3181 (NTU22-1961, GIMCP, Y.J. Chuang and C.R. Jeng)

Cuora flavomarginata 食蛇龜, Female, >22-year-old. The turtle presented with severe edema and weakness of four limbs in June, 2022. Pneumonia, gastrointestinal bloat, and low albumin were noted, and treatments including albumin infusion and calcium administration were prescribed. Biochemical profiles such as uric acid, BUN, and ion levels were abnormal, and no improvement of the albumin concentration was observed after treatment. Ovariohysterectomy was planned for egg binding, and obstruction in the stomach was noted through preoperative gastrointestinal barium x-ray. The patient died during surgery.

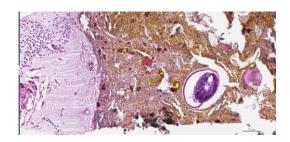
Morphological diagnosis:

- 1. Muscular, vascular, and serosal mineralization, diffuse, severe, gastrointestinal tract
- 2. Gastritis, ulcerative and lymphoplasmacytic, diffuse, chronic, severe, stomach
- 3. Colitis, ulcerative, diffuse, chronic, severe, with nematodes, colon
- 4. Epicardial and myocardial mineralization, diffuse, severe, heart
- 5. Vacuolar hepatopathy, diffuse, severe, with focal mineralization, liver
- 6. Glomerular and tubular mineralization, multifocal, severe, kidney
- 7. Vascular mineralization, with multifocal to coalescing lymphoplasmacytic cystitis, urinary bladder
- 8. Pulmonary edema, diffuse, severe, with multifocal smooth muscle mineralization, lung
- 9. Vascular mineralization, diffuse, moderate, with lymphoid depletion, spleen
- 10. Muscular mineralization, multifocal to coalescing, moderate, with fibrosis, muscle.









Etiological Dx.:

Metastatic calcification of soft tissues in a turtle