395th CSVP Contributor Diagnosis

Date: Apr 21, 2023

Time: 12 : 00~16 : 00

Place: NCHU

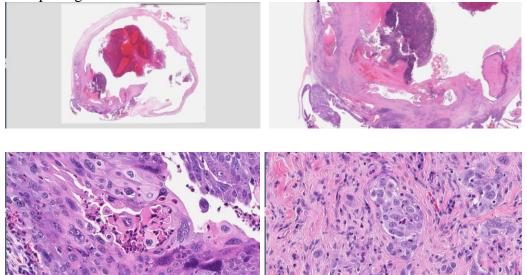
專題演講(10:30~12:00): 淺談生醫領域中的病理技術應用及病理獸醫師的角色 (張皓凱 病理專科獸醫師)

本次會議組織病理切片資訊: <u>http://140.120.114.107/slidecenter.php?id=531</u>

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

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. The neoplasm is composed of multi-cystic structures lined by single squamous epithelial cells that interchange with multilayer and/or dysplastic stratified epithelial cells, eventually exhibiting squamous differentiation.
- 2. The neoplasm is composed of multi-cystic structures lined by single squamous epithelial cells that interchange with multilayer and/or dysplastic stratified epithelial cells, eventually exhibiting squamous differentiation
- 3. Suspected tumor emboli, capsular invasions with desmoplasia, and well-development bone section with neoplastic cell invasion are noted. There are multiple regions of accumulation of necrotic neoplastic cells



Etiological Dx.:

Thymic carcinoma, squamous cell carcinoma, cystic, cranial mediastinal mass in a rabbit

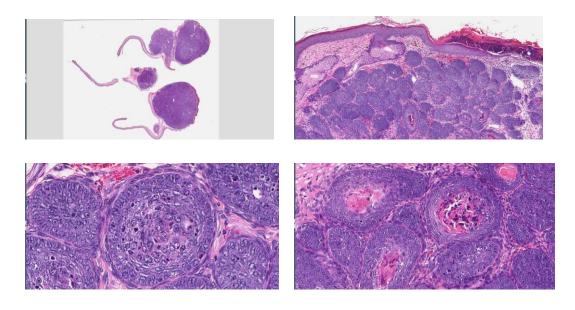
Case 2. CSVP 2023-3183 (NTU2022-3364, GIMCP NTU, H.Y. Wang and Y.C Chang)

Hamster, 10-month-old, male. Several masses were found since Sep 2022, of which grew bigger and multiplied in few months. They were found on the ears, face, nose and chin. The patient had normal appetite and spirit but he scratched ear masses frequently and caused skin wounds. Surgical removal was carried out at mid-Dec 2022.

Morphological diagnosis:

Mass:

- 1. Trichofolliculoma with suspected intranuclear inclusion bodies, masses on the ear
- 2. The peripheral neoplastic cells are palisaded with scant, indistinctly bordered and eosinophilic cytoplasm, and a round to oval vesicular nuclei containing multiple small nucleoli. The inner neoplastic cells have hyperchromatic nuclei containing inconspicuous nucleoli, while the mitotic figures are often seen.
- 3. Homogenous basophilic to amphophilic substance (5.1 to 7.6 mm)



Laboratory examinations: In situ hybridization: polyomavirus (HaPyV) (+)

Etiological Dx.:

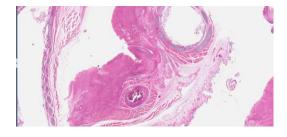
Trichofolliculoma with suspected intranuclear inclusion bodies, masses on the ear in a hamster

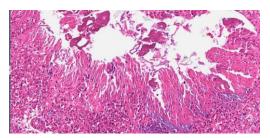
Case 3. CSVP 2023-3184 (WA111-201, ADDC NPUST, C.A. Yang and Y.C. Li) *Elanus caeruleus*, 黑翅鳶 female, subadult, dead in 2022/7/03 during force feeding, caseous material accumulation in oral cavity was noted.

Morphological diagnosis:

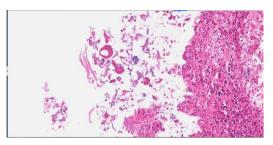
- 1. Stomatitis and esophagitis, segmental, chronic active, severe, fibrinous, necrotizing, with intralesional *Trichomonas* sp. infestation and bacterial accumulation, oral and esophageal mucosa
- 2. Pneumonia, multifocal, chronic, moderate, granulomatous, bronchial, with foreign materials accumulation, lung
- 3. Serositis, multifocal, subacute, mild, fibrinous, serosa
- 4. Cestode infestation, small intestine







Laboratory examinations: PAS: *Trichomonas* sp. (+);



Etiological Dx. Trichomonosis of upper alimentary tract in a *Elanus caeruleus* Case 4. CSVP 2023-3185 (GW2208-1, Ceva TW, N.K. Yu, W.F. Cuan, J.L. Hung, and C.W. Chang)

Nursery piglets, eight-week-old, sowed clinical signs of cyanosis, tremor, and labored breathing. The morbidity rate was 20% and the mortality rate was 5%.

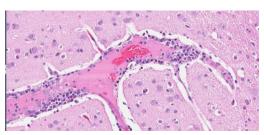
Morphological diagnosis:

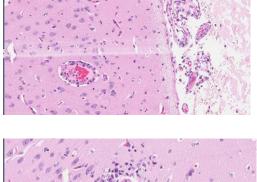
Brain: Meningoencephalitis, eosinophilic and lymphocytic cuffing, multifocal,

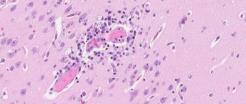
moderate, acute

Epicardia: Hemorrhage, extensive, severe, acute







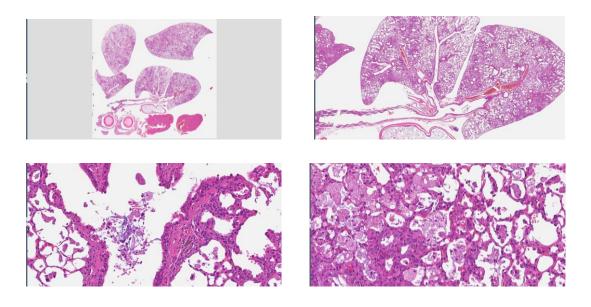


Etiological Dx. Salt poisoning in nursery pigs Case 5. CSVP 2023-3186 (109-10419, NARL NLAC, T.Y. Chen and K.H. Lee)

Genetically modified mouse, female, adult. The mouse showed labored breathing, wasting, hunched posture and poor body condition.

Morphological diagnosis:

- 1. Interstitial pneumonia, multifocal to coalescing, chronic, severe, with foamy proteinaceous exudation and perivascular lymphohistiocytic infiltration, and marked type II pneumocyte hyperplasia, lung.
- 2. Intra-alveolar fungal organisms, multifocal, etiology consistent with Pneumocystis murina, lung.



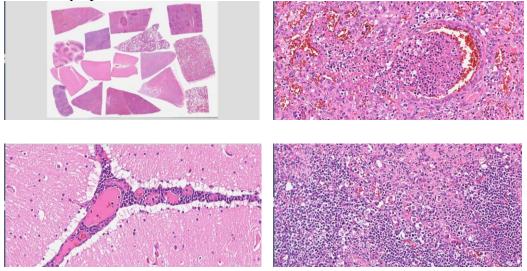
Laboratory examinations: Fresh lung tissue PCR: Pneumocystis spp. (+) Grocott's Methenamine Silver Nitrate (GMS) Stain: (+)

Etiological Dx.: Pneumocystis Murina Infection in Immunodeficient Mice Case 6. CSVP 2023-3187 (CM23-02005, ADDC NCHU, L. Peng, Y.H. Liu, H.Y. Chiou, and C.Y. Yang)

Growing pigs, 13 to 14-week-old, showed cyanosis on the ear wings, extremities and abdomen. The clinical signs of panting and gradually losing weight were also observed. The morbidity rate was about 30% (45/150).

Morphological diagnosis:

- 1. Interstitial pneumonia, proliferative and necrotizing, chronic, severe, diffuse, with type II pneumocytes hyperplasia, lungs.
- 2. Bronchopneumonia, suppurative, acute, severe, diffuse, with intralesional bacterial colonies, thrombosis, and fibrous pleuritis, lungs.
- 3. Meningoencephalitis, suppurative, acute, diffuse, mild, cerebrum and cerebellum.
- 4. Glomerular microthrombosis, acute, with multifocal interstitial hemorrhage, kidney.
- 5. Lymphadenitis, necrotizing, acute, focal, severe, with intralesional bacterial colonies, lymph node



Laboratory examinations: Bact: Salmonella enterica: (+) RT-PCR: PRRSV(+); PCV2 (-)

Etiological Dx.:

PPRS (Porcine Reproductive and Respiratory Syndrome) Concurrent with Salmonella enterica Infection in Growing Pigs