

393<sup>rd</sup> CSVP Contributor Diagnosis

Date: Jan 6, 2023

Time: 12 : 00~16 : 00

Place: NCHU

**專題演講(12:00~13:00)：美國獸醫病理專科醫師考試申請指南與經驗分享(殷際航 病理獸醫師)**

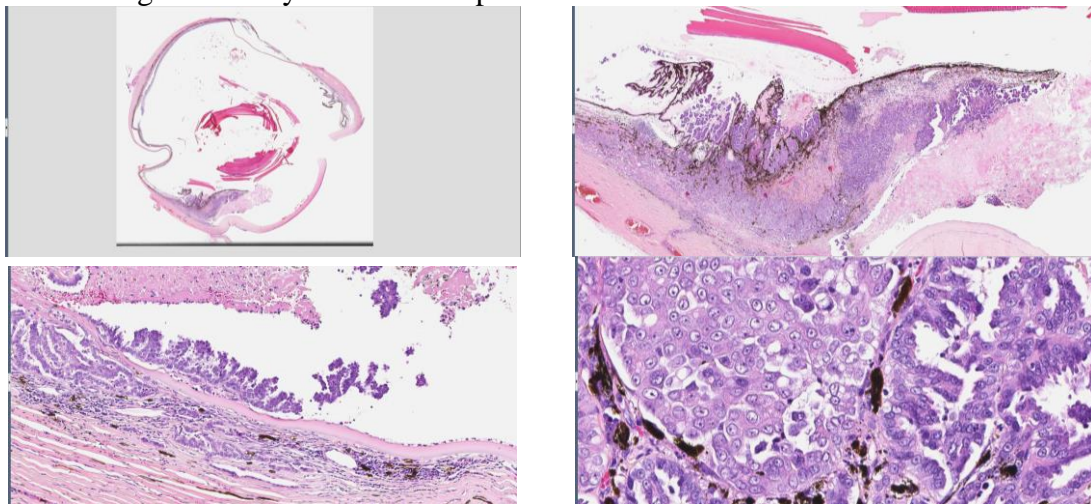
本次會議組織病理切片資訊：<http://www.ivp.nchu.edu.tw/slidecenter.php?id=526>

Case 1. CSVP 2023-3170 (NTU2022-1358, GIMCP NTU, Y.H. Cheng and H.W. Chang)

Feline, mixed, 10-year-old, spayed female. OS cloudy eye was noticed 3 months ago, and gradually worsen as a black spot. Clinical findings included OS iritis, hypopyon, hyphema, with a mass at the posterior ciliary body. Enucleation was performed and submitted for histopathological examination.

Morphological diagnosis:

1. Eye ball: Local extensively occupying the ciliary body and extending to the iris and sclera are non-capsulated, well-demarcated neoplastic growth comprising epithelial cells in small nests, lobules or papillary arrangements
2. The polygonal neoplastic cells have moderate amount of basophilic cytoplasm, an eccentric round to oval nucleus with one to two condense nucleoli, and fine-needle like chromatin. Small nests of neoplastic cells have invaded to the cornea and showing a tendency for further expansion in the sclera.



Positive for PAS, vimentin, S100, desmin, neuron-specific enolase (NSE)

Negative for pan-CK, CK7, CK20, CK8/18, glial fibrillary acidic protein (GFAP), smooth muscle actin (SMA), Melan A

Etiological Dx.:

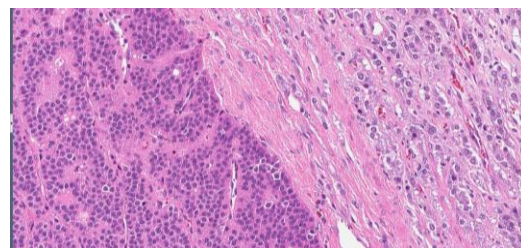
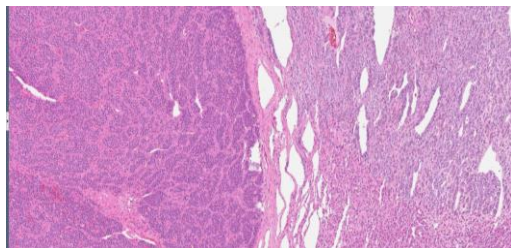
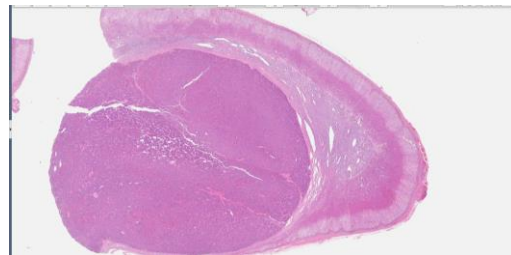
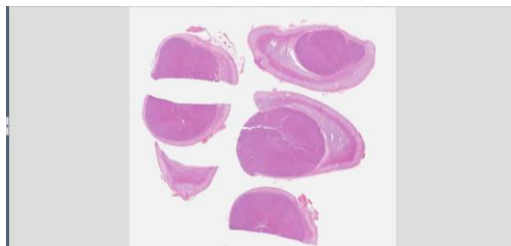
Iridociliary adenocarcinoma, with choroid and cornea invasion, with lymphocytic iridocyclitis, Left eyeball

Case 2. CSVP 2023-3171 (VF2022-204, GIMCP NTU, Y.W. Yang and W.H. Huang)

Feline, mixed, 10-year-old, castrated male. Lt. adenomegaly was accidentally found through USG and had well-defined margin with a slightly irregular capsule outline under CT. The patient showed normal activity and appetite with PU/PD, and hypertension and hypokalemia were noted as well. The cytology demonstrated high cellular of naked nuclei in loose clusters or scatter with mild anisokaryosis. Neuroendocrine tumor was suspected.

Morphological diagnosis:

Adrenal: Yellow-tan in gross, Trabeculae or nests, Like nonneoplastic cortical cells with numerous cytoplasmic lipid vacuoles. Packets separated by fine fibrovascular stroma, Larger and polygonal cells with granular pale amphophilic cytoplasm.



IHC:

Melan A: strong (+); Chromogranin A: (-) With mild pleomorphism  
Confined in the adrenal gland

Etiological Dx.:

Adrenal cortical adenoma, Lt. adrenal gland in a cat

Case 3. CSVP 2023-3172 (TSH22020, ADDC NCYU, H.C. Chuang, N.C. Twu, H.C. Kuo, and D.Y. Lo)

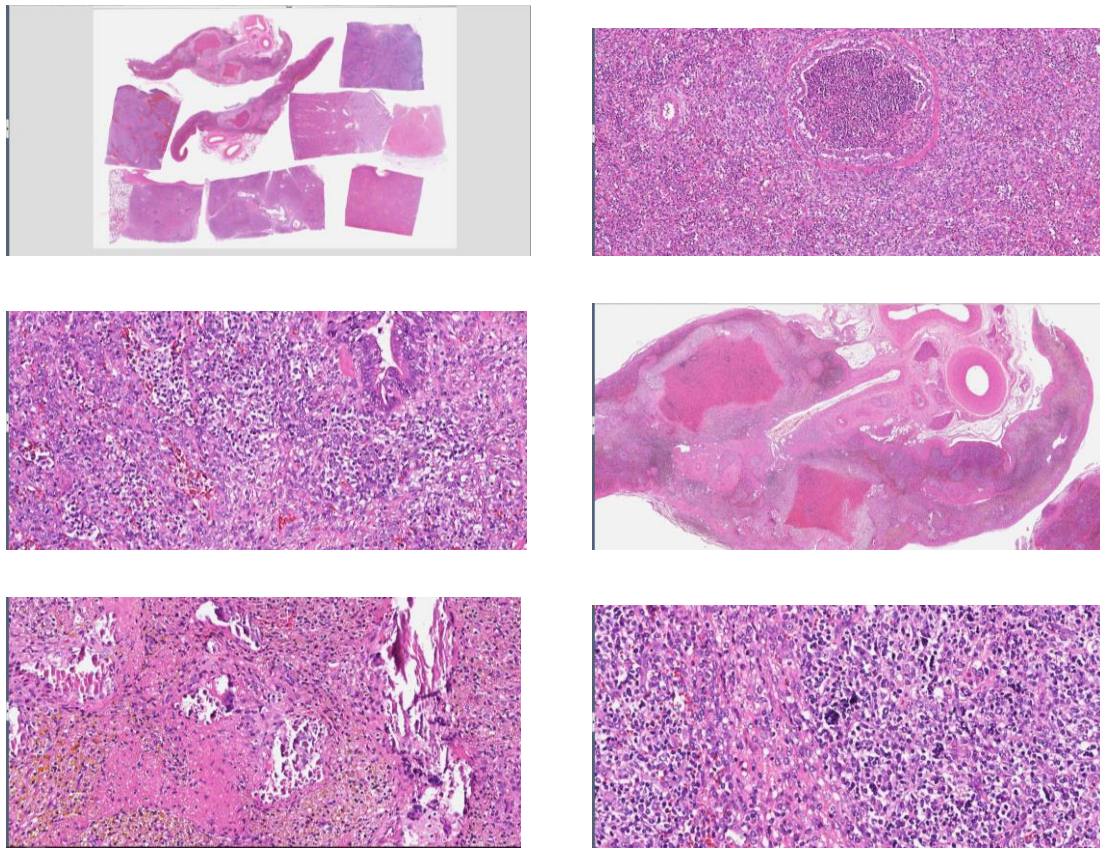
Growing pigs, showed clinical signs of coughing and severe growth retardation (22 kg in 16-week-old ; 35 kg in 18-week-old). The mortality was 5-7%.

Morphological diagnosis:

Lung: severe, subacute, multifocal, suppurative, histiocytic bronchopneumonia

Tonsil, Lymph node: severe, chronic, multifocal, granulomatous, lymphadenitis with severe lymphocyte depletion and intracellular basophilic inclusion bodies

Spleen: severe, chronic, multifocal, splenic infarction with basophilic inclusion bodies



Laboratory examinations:

IHC: PCV2, (+) Severe PCV2-associated lesions (score: 7–9)

RT-PCR: *Pasteurella multocida* (+); PRRS (-) Negative

Etiological Dx.

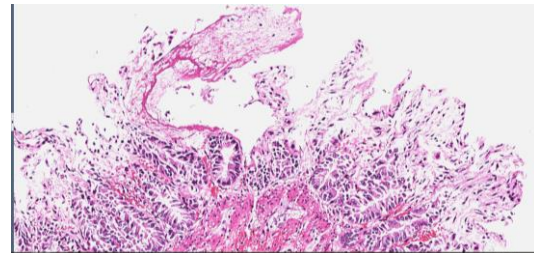
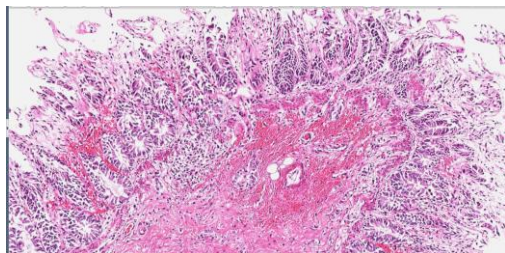
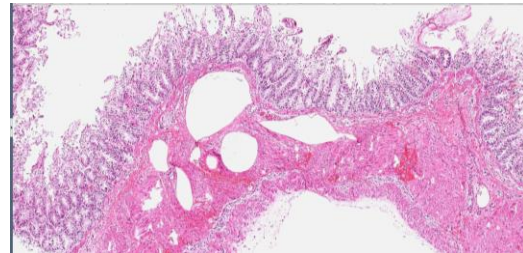
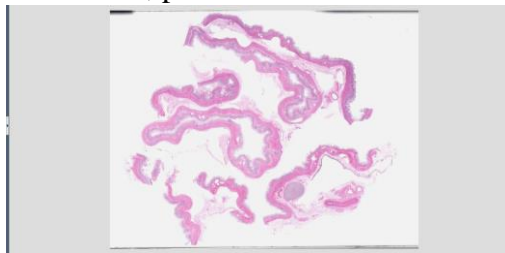
Porcine Circovirus Type 2 Systemic Disease with *Pasteurella multocida* secondary infection in Growing Pig

Case 4. CSVP 2023-3173 (OT111-141-10, ADDC NPUST, C.A. Yang, Y.I. Pan, and Y.C. Li)

Holstein-Friesian cattle, with bilateral congenital contraction of the flexor tendons. Forced feed by orogastric tube 2-3 times and was found dead two days after birth.

Morphological diagnosis:

1. Forestomach: Locally extensive, acute to subacute, severe, necrohemorrhagic, bacterial, with epithelial parakeratosis, multifocal emphysema of submucosal and muscular layer, gastritis
2. Abomasum: Locally extensive, acute to subacute, severe, necrohemorrhagic, bacterial, with multifocal emphysema of submucosal and muscular layer, abomastitis
3. Jejunum, ileum, cecum and colon: Segmental, peracute, severe, necrohemorrhagic, bacterial, with emphysema of submucosal and muscular layer, enteritis and colitis
4. Lung: Locally extensive, acute, severe, necrotizing, bacterial, with vasculitis and edema, pneumonia



Bact: *Clostridium perfringens* CPA (+), CPB (-), CPE (-), ETX (-), IAP (-), CPB2 (-)  
*Escherichia coli*, eaeA (-), Lt (-), Stx-1 (-), K99 (-), Simbu serogroup (-),  
 Orthobunyavirus, Akabane virus, Aino virus, Schmallerberg virus, Bluetongue virus  
 (-)

Etiological Dx.

Gastrointestinal *Clostridium perfringens* type A infection

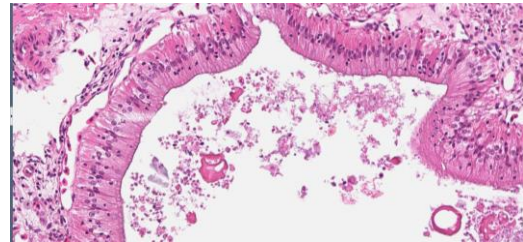
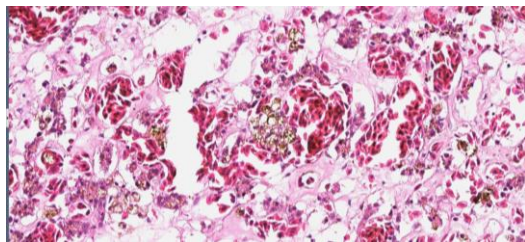
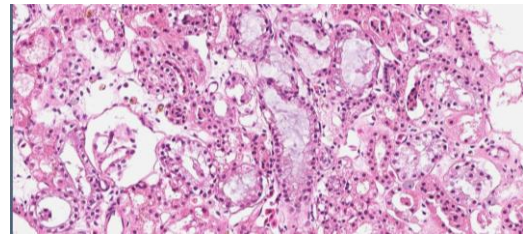
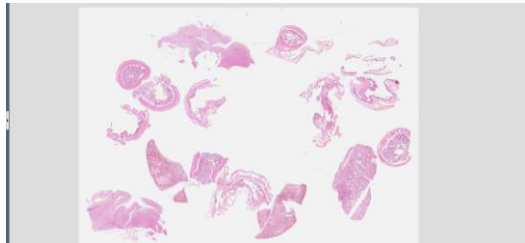
Systemic bacterial infection, Ruminal acidosis suspected, Congenital contraction of the flexor tendons

Case 5. CSVP 2023-3174 (PIBC22-4525, PIBC, W.T Li and Y.C. Tseng)

Gecko, adult, male. Clinical signs of weight loss, lethargy, and diarrhea were noted and no response to therapy.

Morphological diagnosis:

1. Intestine: Enteritis, proliferative and lymphoplasmacytic, chronic, diffuse, moderate to severe, with edema and numerous free and apically attached apicomplexans, etiology consistent with *Cryptosporidium* spp.
2. Liver: Hepatic atrophy, chronic, diffuse, moderate to severe, with increase of melanomacrophages
3. Others... True emaciation and chronic wasting



PCR: *Cryptosporidium varanii* (+)

Etiological Dx.:

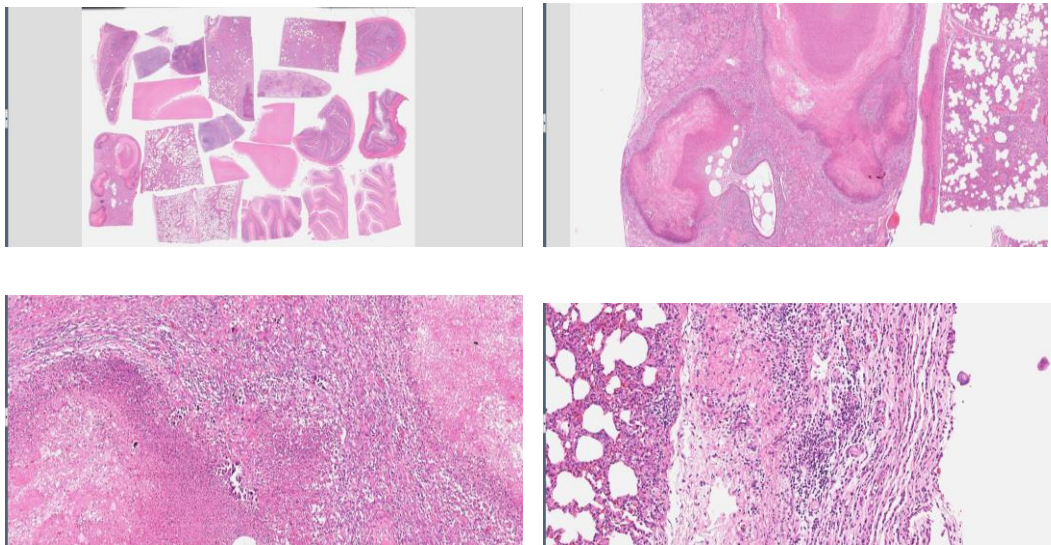
*Cryptosporidium* spp. in a Gecko

Case 6. CSVP 2023-3175 (CM22-06004, ADDC NCHU, B.Y. Lai, Y. Teng, P.C. Hsu, Y.H. Liu, H.Y. Chiou, J.W. Liao, and C.Y. Yang)

Growing pigs, 13 to 14-week-old, showed coughing, panting or watery diarrhea in clinic. The morbidity was about 80% (160/200) and the mortality was about 10% (20/200).

Morphological diagnosis:

1. Lung: Interstitial pneumonia, proliferative and necrotizing, diffuse, severe, chronic, with type II pneumocyte hyperplasia, intra-alveolar macrophage necrosis and marked peribronchiolar and perivascular lymphoid hyperplasia.
2. Lung: Bronchopneumonia, suppurative and necrotizing, multifocal to coalescing, moderate, chronic-active, with locally-extensive, fibrinosuppurative and fibrinous pleuritis.
3. Intestine: Enteritis, eosinophilic, moderate, chronic-active, diffuse, with fibrinosuppurative serositis.
4. Cerebrum: Meningitis, non-suppurative, chronic, mild, multifocal.
5. Lymph nodes: Lymphoid depletion, chronic, mild.



Bact: *Bordetella bronchiseptica*, *Streptococcus suis*; *Pseudomonas aeruginosa* (+)

PCR: PCV2 (-); *Mycoplasma hyopneumoniae*, *Mycoplasma hyorhinis* (+)

RT-PCR: PRRSV (+)

Etiological Dx.:

Porcine Respiratory Disease Complex in Growing Pigs