405th CSVP Contributor Diagnosis

Date: June 21, 2024

Time: 12 : 00~16 : 00

Place: NCHU

專題演講(12:00~13:00)：淺談亞洲後非洲豬瘟時代之預防及控制 (侯富祥 博士)

本次會議組織病理切片資訊： http://140.120.114.107/slidecenter.php?id=545

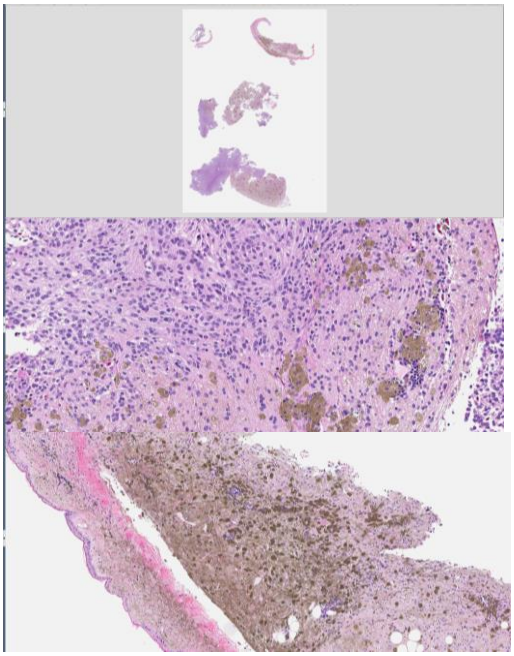
切片名稱：Case 1. NTU2024-0085C

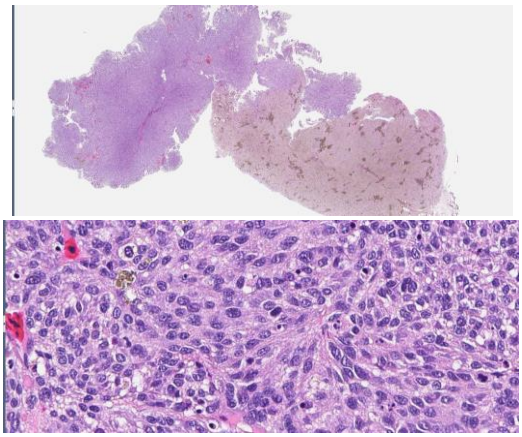
Case 1. CSVP 2024-3242 (NTU2023-1930, GIMCP, Y.J. Chuang amd C.H. Liu)

Leopard gecko (Eublepharis macularius), Lemon Frost, female, 4-year-old. A mass was found near the Rt. tympanum (ear hole) and gradually enlarged for the following two weeks. The mass was excised for histopathological examination and showed a white cut surface. Pigment granules become birefringent under polarized light.

Morphologic diagnosis :

Mass: Epithelioid cells with variable amounts of coarse, golden-brown to olive-green intracytoplasmic pigment granules. Occasional whorls, Fusiform cells with indistinct cell borders and contain variable amounts olive-green intracytoplasmic pigment granules. Round to ovoid nuclei with fine chromatin and one occasionally seen nucleolus. The mitotic count is about 7 per 10 HPF (2.37 mm2)





Lab. examination:

Pigment granules become birefringent under polarized light

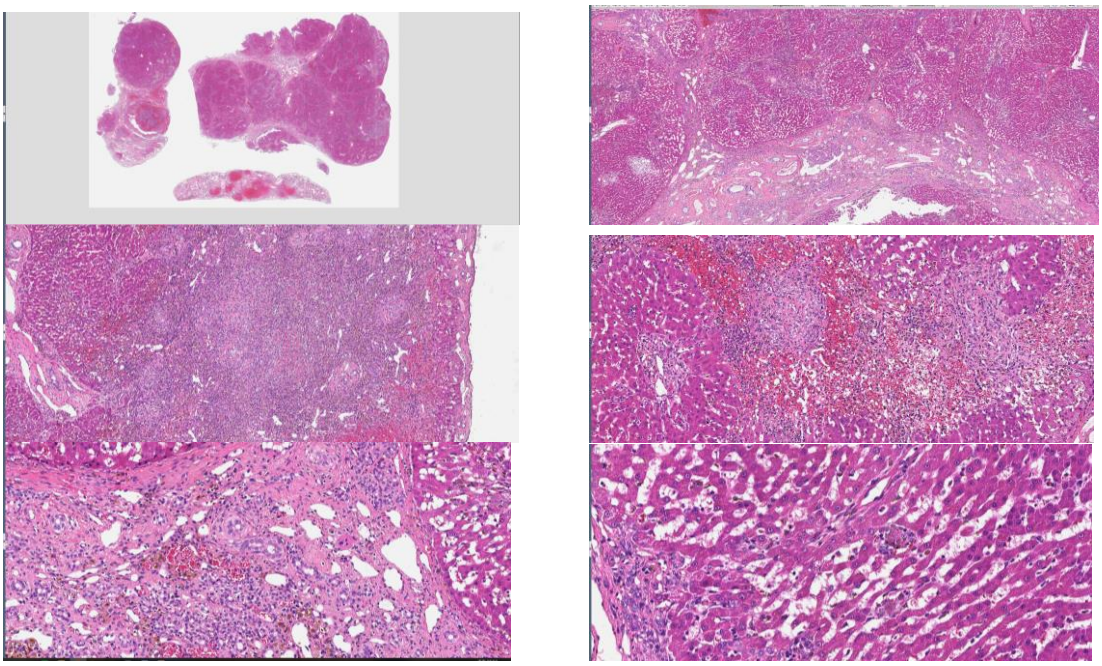
Dx: Iridophoroma in a lemon frost gecko

切片名稱：Case 2. 23-1208

Case 2. CSVP 2024-3243 (NTU2023-1208, NTU GIMCP, C.H. Shih and C.R. Jeng) Canine, Labrador Retriever, castrated male, 9-year-old. The patient showed decreased activity for a month. The liver index was markedly increased (ALT 1805; ALP 805) accompanied with nonregenerative anemia. Laparotomy was performed for liver biopsy.

Morphologic diagnosis :

Liver: Hepatitis, lymphohistiocytic, multifocal to coalescing, centrilobular(?), severe, chronic, with abundant intracellular copper granules, necrosis, bridging fibrosis, ductular reaction, micronodular regeneration, hemosiderosis, and sinusoidal capillarization, liver.



Lab. examination:

Masson’s trichrome: Bridging fibrous septa (+)

Rubeanic acid, Rhodanine : Copper granuloma (+)

Prussian blue: hemosiderin (-)

Diagnostic criteria of CuCH: Hepatic copper quantification with concentrations usually greater than 1000 ppm DW liver.

by Atomic absorption spectrometry < 400 ppm DW: normal; > 1000 ppm DW: toxic

Special stains (rubeanic acid, rhodanine) can identify copper-laden lysosomes at concentrations > 400 ppm dw (dry wet)

Dx: Hepatitis in a Dog (Condition: Copper associated chronic hepatitis (CuCH)

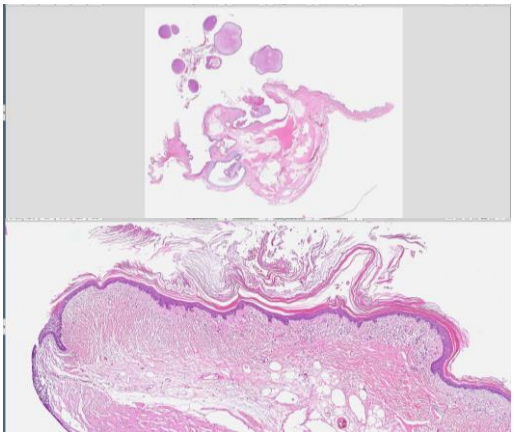
切片名稱：Case 3. AP2024-0119-001

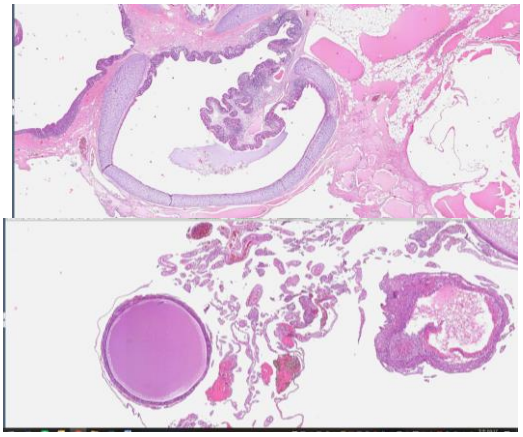
Case 3. CSVP 2024- (AP2024-0119, AU PBVM, K.W. Liang , T.S. Lin, C.C. Huang, C.H. Yang)

Bearded dragon (Pogona Vitticeps), unneutered female, 2-year-old. The patient had coelomic distention, but it had good mental and appetite. Physical examination revealed oral mucosa with jaundice and coelomic distention..

Morphologic diagnosis :

Mass: Oavry has cells derived from three germ cell lines: ectodermal epithelium, including neuroepithelium, mesodermal (muscle, mesenchymal tissue, fat, melanin, skin, keratin, bone, cartilage), and endodermal (respiratory tissues, GI, urinary).





Dx: Benign ovarian teratoma in Bearded Dragon

切片名稱：Case 4. 1432A

Case 4. CSVP 2024-3245 (PIBC24-1432, PIBC, W.T. Li and Y.H. Hsiao)

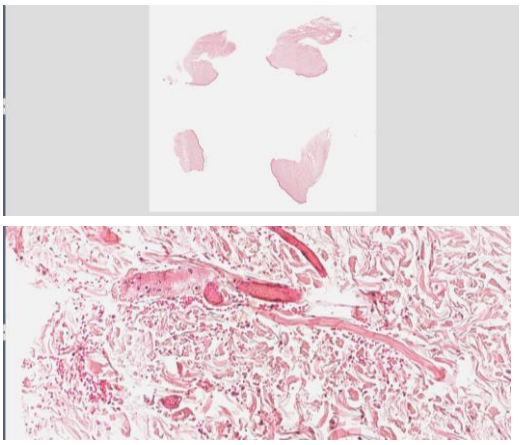
Feline, 7-year-old, male. Multiple skin lacerations and tears with extensive alopecia on right-side scapular region for few weeks.

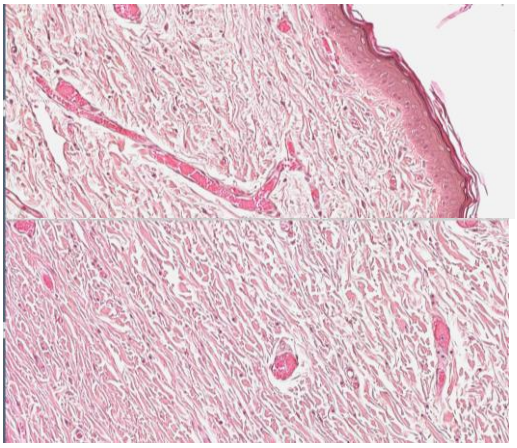
Morphologic diagnosis:

Skin: Fibrosing dermatitis, extensive, chronic, severe, with absence/loss of adnexal units and mild epidermal atrophy

Note #1: No evidences of atrophic dermatitis, infectious microorganisms, and immune mediated etiologies.

Note #2: Alopecia is likely permanent





Lab. examination:

Confirmed by trichrome stain (red fibers) (+)

Histopathology from a cachectic cat with steroid-induced FSFS

Dx: Feline skin fragility syndrome (FSFS)

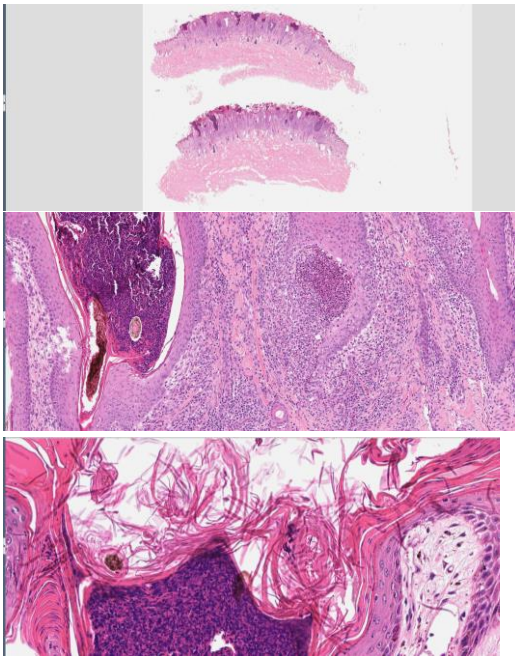
切片名稱：Case 5. 2024-208-4

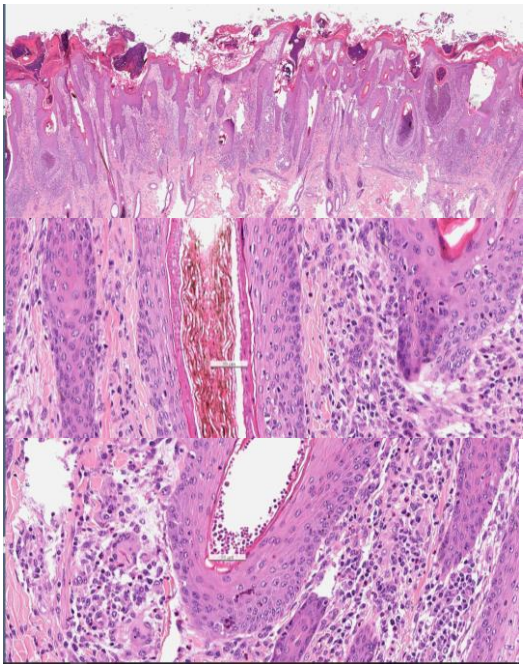
Case 5. CSVP 2024-3246 (2024-208-4, ADDC VRI, Y.W. Chen, Y.C. Chuang, S.C. Hu, F. Lee, and Y.C. Tu)

Holstein Cattle, adult, 2-year-old. The animal was stunted and culled by the owner. Abnormality in pre-slaughter examination was reported by the veterinarian. Multiple slightly-raised, white to gray skin nodules covered with crusted surfaces were noted, and mostly affected the head and upper body.

Morphologic diagnosis:

Haired skin：dermatitis, epidermal to superficial dermal, exudative, necrotizing and pyogranulomatous, multifocal, subacute, moderate to severe with serocellular crust, orthokeratotic/parakeratotic/infundibular hyperkeratosis, suppurative folliculitis, and numerous intrafollicular dermatophyte arthrospores 分節芽胞 and hyphae





Lab. examination:

GMS, PAS (+): Ectothrix, Endothrix (+)

Ectothrix means the hyphae and conidia do not invade the hair shaft and instead degrade the cuticle, while endothrix refers to fungi that invade the hair shaft

Fungal ITS gene PCR：*Trichophyton verrucosum*

Viral real-time PCR/ RT-PCR

Bovine leukemia virus (BLV) (+) latent infection
Pseudocowpox virus (PCPV) (+) latent infection
Lumpy skin disease virus (LSDV) (-)
Bovine herpesvirus 2 (Pseudo-LSDV) (-)
Bovine papular stomatitis virus (BPSV) (-)
Bovine papillomavirus (BPV) (-)

Electron Microscopy ：NSF

Bacterial culture：NSF

Dx: Dermatophytosis in a Holstein cattle with latent infection BLV & PCPV (carriers)

切片名稱：Case 6. CP23-01003B

Case 6. CSVP 2024-3241 (CP23-01003, ADDC NCHU, Y. Teng, S.W. Yang, H.Y. Chiou, J.W. Liao, and C.Y. Wang)

Mule ducks, 18-day-old, showed signs of nasal discharge, white diarrhea, and neurological symptoms. The morbidity was about 60% (300/500) and the mortality was about 10% (50/500), respectively.

Morphologic diagnosis:

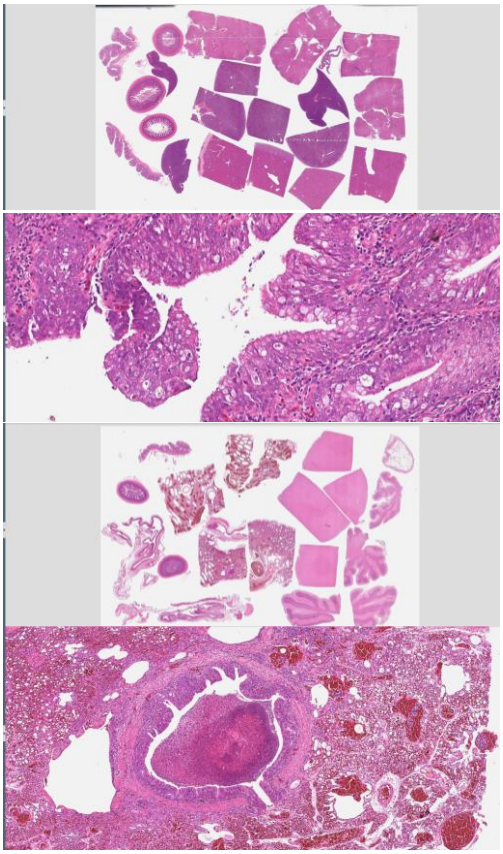
Meningoencephalitis, suppurative, locally extensive to diffuse, moderate to severe, chronic-active, with minimal vasculitis, cerebrum and cerebellum.

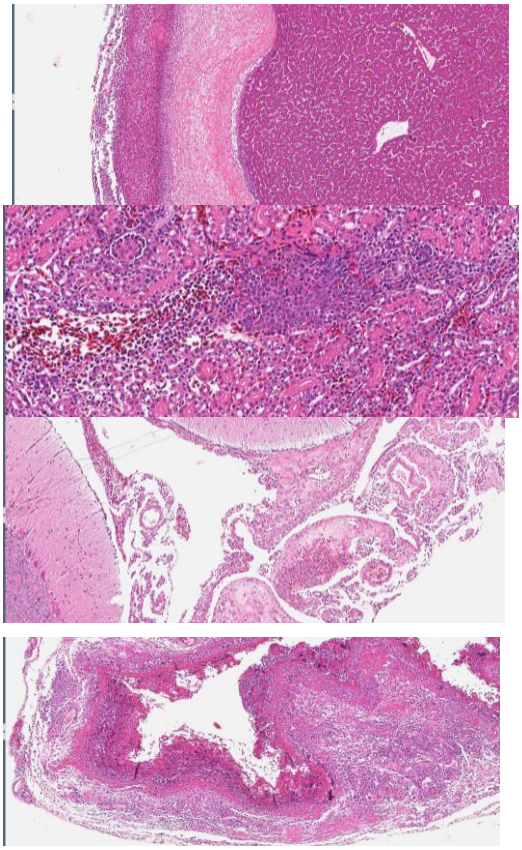
Perihepatitis, fibrinopurulent, diffuse, severe, chronic-active, liver.

Pericarditis and epicarditis, pyogranulomatous and heterophilic, diffuse, severe, chronic-active, heart.

Airsacculitis, fibrinopurulent and necrogranulomatous, diffuse, severe, chronic-active, air sac.

Lymphoid depletion, diffuse, severe, chronic, with numerous intraepithelial apicomplexan schizonts consistent with Cryptosporidium sp., bursa of Fabricius.





Lab. examination:
Blood agar, PCR: *Riemerella anatipestifer* (+);
Bursa: Cryptosporidium spp (+)

Dx: *Riemerella anatipestifer* infection in Mule Ducks