

## CSVP 376 Diagnosis

Date: Jul 24, 2020

Time: 10 : 30~16 : 00

Place: AHRI

專題演講(10:30~12:00)：由動物感染經驗談冠狀病毒性疾病(劉振軒教授)

本次會議組織病理切片資訊：<http://140.120.114.107/slidecenter.php?id=467>

Case 1. CSVP 2020-3067 (NTU2020-365G, NTU GIMCP, C.H. Shih and Y.C. Chang)

Canine, beagle, 15-year-old, spayed female, showed signs of vomit, anorexia, and oliguria. The blood exam revealed elevated BUN and creatinine, hypoalbuminemia, hypernatremia and hyperkalemia. The abdominal ultrasonography showed arterial thromboembolism and suspected left adrenal tumor with vessel invasion. The patient was euthanized due to the poor prognosis.

Morphological diagnosis:

1. Amyloidosis, glomerular, global, diffuse, severe, with lymphoplasmacytic interstitial nephritis, tubular epithelial degeneration and regeneration, hyaline casts, calcification, kidneys
2. Infarction, focal, acute, severe, right kidney
3. Arterial thromboembolism, kidneys and adrenal glands
4. Arterial medial hypertrophy, kidney, lung and heart
5. Adrenalitis, necrotizing, diffuse, chronic active, severe, with arterial thrombosis and fibrotic steatitis, the left adrenal gland
6. Vacuolar hepatopathy, diffuse, moderate, with cholestasis, bile duct hyperplasia, fibrosis and nodular hyperplasia, liver
7. Calcinosis circumscripta, multiple organs including kidney and serosa of small intestine and liver

Laboratory examinations:

Congo red: apple green in the polarizing light (+)

Etiological Dx.

Glomerular Amyloidosis and Arterial Thromboembolism in a Beagle

Case 2. CSVP 2020-3068 (R2019-203, GIVP NCHU, Z.Y. Lin, Y.C. Chang, J.W. Liao, and H.Y. Chiou)

Loggerhead turtle, adult, female. The patient was rescued and submitted to the rescue center on 6th, October. Clinical examination showed neurological signs including head tilting and right side body floating.

Morphological diagnosis:

1. Neuro ectodermal tumors, with spirorchiidae spp. eggs infection and hydrocephalus, brain
2. Spirorchiidiosis, mild to moderate, lung, spleen, salt gland and thymus

Laboratory examinations:

IHC stain	Result	Target cell
CD56	Positive	Neuroendocrine/neuroectodermal
Neurofilament	Negative	Neuronal cell
NSE	Negative	Neuronal/ neuroendocrine
Smooth muscle actin	Negative	Smooth muscle
Vimentin	N/A	Mesenchymal cell
CD99	N/A	Endothelial/ ependymal cell
Synaptophysin	N/A	Neuroendocrine

Etiological Dx.

Neuro ectodermal tumors in loggerhead sea turtle

Case 3. CSVP 2020-3069 (BL19022, ADDC NCYU, N.C. Twu, H.C. Kuo, M.H. Chang, and D.Y. Lo)

Growing pig, 20-week-old, showed clinical sign of bloody diarrhea since 17~18-week-old. Mortality was 20% (100/500) and mortality was 1% (5/500).

Morphological diagnosis:

1. Proliferative ileitis, hemorrhagic, segmental, acute, severe with fibrinohemorrhagic cast in the intestinal lumen.

Laboratory examinations:

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

Warthin starry stain (+)

Etiological Dx.

Proliferative hemorrhagic enteropathy (PHE)

Case 4. CSVP 2020-3070 (D109-026-3, ADDC NPUST, M.T. Wu, Y.C. Li, M.T. Chiou, and C.N. Lin)

Suckling pigs, 2-day-old, showed clinical signs of subcutaneous edema and sudden death after birth.

Morphological diagnosis:

1. Dermatitis, locally extensive, subacute, severe, with edema and hemorrhage, with rod-shaped bacteria accumulation, skin
2. Myositis, locally extensive, subacute, severe, with necrosis, with rod-shaped bacteria accumulation, muscle

Lab. examined:

*Clostridium perfringens* type A (+)

Etiological Dx.

Subcutaneous edema induced by *Clostridium perfringens* type A in suckling pigs

Case 5. CSVP 2020-3071 (CS19-1197, ADDC NCHU, Y.X Lin, Y.H Li, W.R Hsieh, Y.C Chang, H.Y. Chiou, and J.W Liao)

Guinea pigs, about 1-month-old, male, showed clinical signs of weakness and increased mortality (2 to 3 deaths per day) in the farm.

Morphological diagnosis:

1. Bronchopneumonia, necrotic and suppurative, severe, subacute, locally extensive, with oat-like cells, edema and emphysema, lung
2. Hepatitis, necrotizing, severe, subacute, multiple, liver
3. Lymphadenitis, necrotizing, severe, subacute, multifocal, mesenteric lymph node
4. Enteritis, lymphoplasmacytic, moderate, subacute, diffuse, intestine

Lab. examined:

*Bordetella bronchiseptica* (+); *Salmonella* serogroup D1 (+)

Etiological Dx.

Pulmonary bordetellosis and salmonellosis in guinea pigs

Case 6. CSVP 2020-3072 (2020-003-16, AHRI, Y.W. Chen, M.S. Lee, and Y.C. Tu)

Leopard cat (*Prionailurus bengalensis*), male, adult. The animal was found weak and moribund on the road, and then it died before arrival to the Wildlife First Aid Station of Endemic Species Research Institute.

Morphological diagnosis:

1. Small intestine : cestode and ascarid infestation
2. Stomach : nematode larva migration
3. Skeletal muscles of abdominal wall : Zenker's degeneration and necrosis, locally-extensive, severe with fascial edema and hemorrhage.

Lab. examined:

PCR/RT-PCR and sequencing

Canine parvovirus type 2a (CPV-2a) : positive

FIPV, CDV, FHV-1, *Chlamydia* sp. : negative

Fluorescent Antibody Test

Rabies virus : Negative

Bacterial culture Lung : no growth

Etiological Dx.

Notoedric Mange in a free-ranging Leopard cat