

## CSVP 373 Diagnosis

Date: Oct 4, 2019

Time: 13 : 00~16 : 00

Place: NCHU

本次會議組織病理切片資訊：

<http://140.120.114.107/slidecenter.php?id=458>

Case 1. CSVP 2019-3049 (NTU2019-1602C, NTU GIMCP, C.H. Shih and W.H. Huang)

Ring-tailed lemur, 5-year-old, female, showed depression and anorexia, and thus was referred to hospitalization. The patient passed away four days later.

Morphological diagnosis:

1. Splenitis, necrotizing, multifocal to coalescing, acute, severe, with extra- and intracytoplasmic apicomplexan tachyzoites and lymphoid depletion, spleen
2. Lymphadenitis, necrotizing, multifocal to coalescing, acute, severe, with extra- and intracytoplasmic apicomplexan tachyzoites, mesenteric, pancreatic and hilar lymph nodes
3. Hepatitis, necrotizing, multifocal to coalescing, acute, severe, with extra- and intracytoplasmic apicomplexan tachyzoites, liver
4. Adrenalitis, necrotizing, multifocal, acute, moderate, with extra- and intracytoplasmic apicomplexan tachyzoites, adrenal glands
5. Enteritis, necrotizing, multifocal and transmural, moderate to severe, with extra- and intracytoplasmic apicomplexan tachyzoites, small intestines
6. Myocarditis, necrotizing, multifocal, acute, moderate, with vasculitis and fibrinoid necrosis, heart
7. Edema, diffuse, acute, moderate to severe, lung
8. Gliosis, multifocal, mild, with hemorrhage, cerebrum

Laboratory examinations:

IHC, PCR for REP-529 gene of *Toxoplasma gondii* (+)

Liver, spleen: positive

Bacterial culture

Liver: no significant bacterial growth

Etiological Dx.

Systemic Toxoplasmosis in a Ring-Tailed Lemur

Case 2. CSVP 2019-3050 (NTU2019-1875G, NTU GIMCP, Y.H. Hsieh, P.H. Yu, and C.R. Jeng)

Macaw parrot, 6-year-old, male. Food retention, liver hypertrophy and proventriculus

dilation were noted.

1. Encephalitis and myelitis, lymphoplasmacytic, perivascular, subacute, mild to moderate, with, neuronal degeneration to necrosis, and marked satellitosis, brain
2. Ganglioneuritis, lymphoplasmacytic, multifocal, subacute, moderate, paravertebral ganglia, proventriculus and gizzard
3. Adrenalitis, multifocal, subacute, mild, adrenal glands

Lab examined;

IHC, PaBVs RT-qPCR (+): GI tract, cerebrum

Etiological Dx.

Proventricular Dilatation Disease (PDD) in a Macaw Parrot

Case 3. CSVP 2019-3051 ( BU19021, ADDC NCYU, S.W. Chen, H.C Kuo, C.L. Chen, Y.C. Su, M.H. Chang, and D.Y. Lo)

Gosling, 21-day-old, showed clinical signs of loss of feather and high cumulative mortality.

Morphological diagnosis:

1. Hepatitis, hemorrhagic, necrotic, random/multifocal, chronic, severe with cholestasis
2. Osteomyelitis, heterophilic, granulomatous, multifocal, chronic-active, severe with osteolysis
3. Bronchopneumonia, heterophilic, granulomatous, multifocal, chronic-active, severe

Lab. examined:

PCR: Parvovirus (-);Duck Hepatitis A Virus-1 (+)

Etiological Dx.

Duck Hepatitis A Virus-1 Infection and Colibacillosis in Goslings

Case 4. CSVP 2019-3052 (OT108-103-1, NPUST, X.L. Wu, P.J. Leu, and Y.C. Li)

Canine, mongrel, 2-year-old, intact male. The dog was suspected paraquat intoxication with tachypnea, anorexia and renal failure.

Morphological diagnosis:

1. Interstitial pneumonia, diffuse, subacute to chronic, severe, with type II pneumonocytes proliferation and hemorrhage, lung
2. Interstitial nephritis, multifocal, subacute to chronic, mild, kidney
3. Perivascularitis, multifocal, subacute to chronic, mild to moderate, stomach

Lab. examined:

UV-VIS Spectrophotometer for paraquat: Urine: 190 ng/ml (Day 5), urine (-)

Etiological Dx.

## Canine paraquat poisoning

Case 5. CSVP 2019-3053 (SP108-16912, NPUST, H.M. Lan and C.D. Chang)

Canine, German Shepherd, 1-year-and-2month-old, female, neutered. The patient was brought to hospital for a gingival mass on the right mandible.

Morphological diagnosis:

1. Numerous well-formed tooth like structures (denticles), composed of ectomesenchyme, odontoblasts, dentin, enamel and ameloblasts
2. Non-demarcated and non-capsulated mass
3. Mitotic cells and malignant features were not present

Etiological Dx.

Compound mandibular odontoma in a young German shepherd

Case 6. CSVP 2019-3054 (CW19-054, ADDC, NCHU, Y.C. Chang, Y.C. Chang, J.W. Liao, and H.Y. Chiou)

*Ursus thibetanus formosanus*, male, age was unknown, had been raised in Endemic Species Research Institute (TESRI) for years. The patient had cardiac problem with low glomerular perfusion, and multifocal nodules in the skin. At necropsy, multifocal nodules were present in the lungs and liver. A mass was located on the left side of posterior vena cava, and was measured to be  $9.2 \times 8.5 \times 4$  cm in size.

Morphological diagnosis:

1. Suspected adrenocortical carcinoma, with many intravascular tumor emboli, lungs, and liver metastases, left adrenal gland
2. Pancreatitis, multifocal, acute, moderate, with saponification of adjacent adipose tissue, pancreas
3. Cataract, circumferential, moderate, with cornea angiogenesis and retinal degeneration and detachment, eyes
4. Myocardial fibrosis, multifocal, mild, with mitral myxomatous change, and calcification, heart
5. Enteritis, necro-granulomatous, multifocal, chronic, moderate, with crypts dilation and ulceration, jejunum, and duodenum
6. Serositis, granulomatous, multifocal, chronic-active, moderate, with intralesional nematodes, duodenum and colon
7. Lipofuscinosis and corpora amylacea, multifocal, cerebellum, and cerebrum
8. Ulceration, multifocal, acute, moderate, with micro thrombus, stomach
9. Multiple epidermal inclusion cyst, skin
10. Thyrolipomatosis and focal acinar dilation, diffuse, severe, with epithelial cells

papillary hyperplasia, thyroid gland

11. Zenker's degeneration, multifocal, moderate, skeletal muscle

12. Myositis, multifocal, chronic, moderate, with Zenker's necrosis, and thrombus, tongue

13. Hemorrhage, multifocal, severe, urine bladder

Laboratory result:

IHC: S100, Inhibin- $\alpha$ (+); Chromogranin A, Synaptophysin, HepPar1 (-)

Etiological Dx.

Adrenocortical Carcinoma in Formosan Black Bear