

411 CSVP Contributor Diagnosis

Date: May 16, 2025

Time: 12 : 00~16 : 00

Place: NCHU

專題演講(12:00~13:00)：人工智慧於數位毒性病理學之應用 (廖俊旺 老師)

本次會議組織病理切片資訊：<http://140.120.114.107/slidecenter.php?id=554>

切片名稱：Case 1. NTU24-2209B

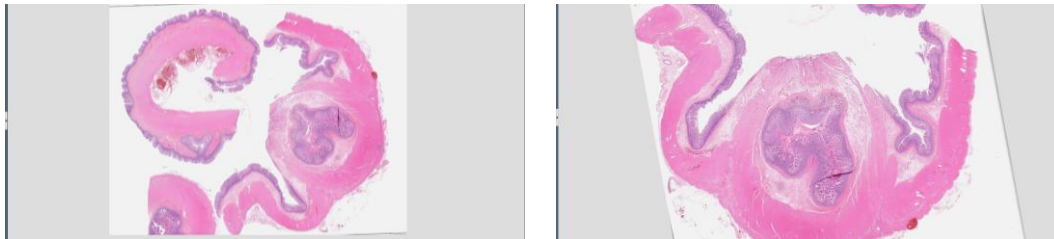
Case 1. CSVP 2025-3278 (NTU2024-2209, NTU GIMCP, H.H. Yeh, C.H. Shih, and H.W. Chang)

Feline, mixed, spayed female, 9-year-old. The patient had hematochezia in October 2024, improving temporarily with Augmentin. A December 2 colonoscopy revealed a polyp-like mass at the cecum-ileum junction. A partial polyp excision failed, leading to surgical resection of the distal ileum and proximal ascending colon with anastomosis.

Morphologic diagnosis :

distal ileum and proximal ascending colon:

Intestinal duplication, the polyp-like mass on the junction of distal ileum, proximal ascending colon and cecum



Lab. examination:

Dx: Intestinal duplication in a cat

切片名稱：Case 2. A112-015-1-2

Case 2. CSVP 2025-3279 (A112-015-1-2, ADDC NPUST, S.H. Ma, Y.H. Hsieh, Y.W. Tsai, Y.C. Li, and M.C. Cheng)

Broiler, 21-day-old. The cumulative mortality rate began to increase gradually from day 19 of age, reaching approximately 1.7% (1,240/74,000). Necropsy on day 19 revealed hepatic steatosis and hepatic hemorrhages..

Morphologic diagnosis :

Liver: hepatitis, necrotic, moderate, subacute, multifocal, with basophilic intranuclear inclusion bodies

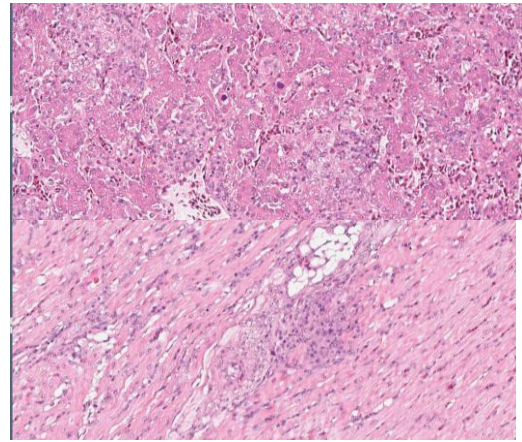
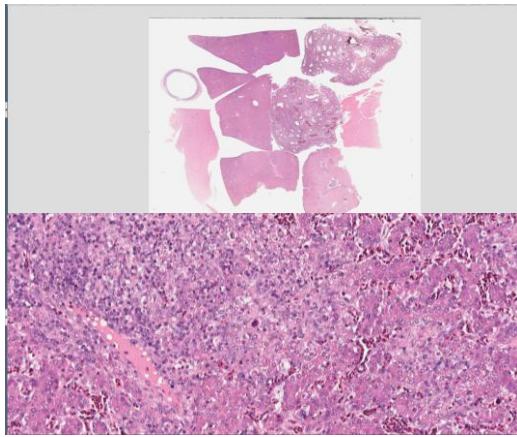
Kidney : nephritis, interstitial, mild, subacute, multifocal

Heart : myocarditis and epicarditis, granulomatous, severe, chronic, locally extensive

Trachea : Tracheitis, lymphocytic, mild, chronic, multifocal

Muscle: Necrosis, multifocal, moderate, acute

Lung: NSL.



Lab. examination:

1. PCR: Fowl aviadenovirus (FAdV): (+); Infectious bronchitis virus (IBV): (-)
2. Bact: *Salmonella* spp (+++)

Dx: Inclusion body hepatitis (IBH) and Salmonellosis in broilers

切片名稱：Case 3. D113-550-4

Case 3. CSVP 2025-3280 (D113-550, ADDC NPUST, H.W. See, Y.H. Hsieh, C.H. Yan, and Y.C. Li)

Piglet, 3-day-old, showed clinical signs including weakness, underweight, and yellowish diarrhea. Piglets aged 2-3 days appeared weak and underweight, with sudden death occurring at 4-5 days of age. The incidence rate was 5%, and the mortality rate reached 30%.

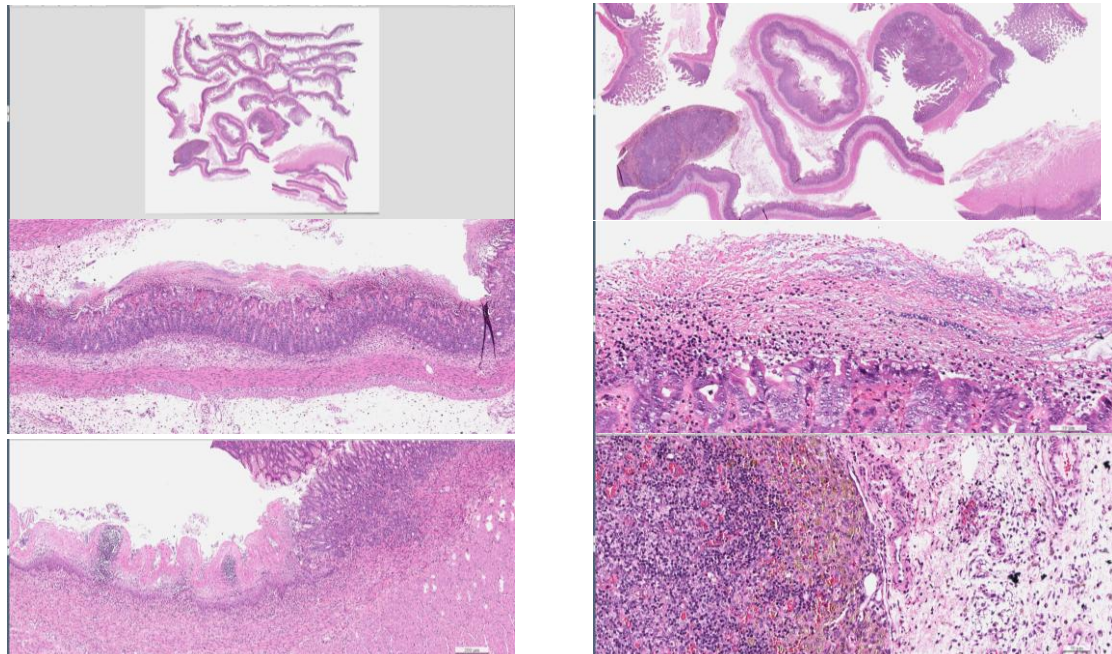
Morphologic diagnosis :

Colon: Colitis, severe, acute, segmental, erosive, with rod-shape bacteria in erosive area, and submucosal and serosal edema

Stomach: Gastritis, multifocal, mild, acute

LN: brown pigmentation, peripheral, multifocal, acute, suspected iron injection at birth day

Jejunum: NSL



Lab. examination:

Mesentery Anaerobic culture : Clostridium difficile (+)

Ileal content: RT-PCR: Rotavirus (A/B/C), PEDV, TGEV, SDCov (-)

Dx: Clostridium Difficile Infection in Suckling Piglets

切片名稱：Case 4. 114-20010

Case 4. CSVP 2025-3281 (114-20010, NIAR NCB, T.Y. Chen, K.H. Lee, and H.H. Sung)

Genetically modified mouse, 7.5-month-old, female. The untreated GM mouse showed hypoactivity, weight loss, hunched posture, chronic wasting and poor reproductive performance.

Morphologic diagnosis :

Kidney: Hydronephrosis, pelvic, focal, moderate, chronic, bilateral

Tubular dilation and glycogen nuclei, moderate.

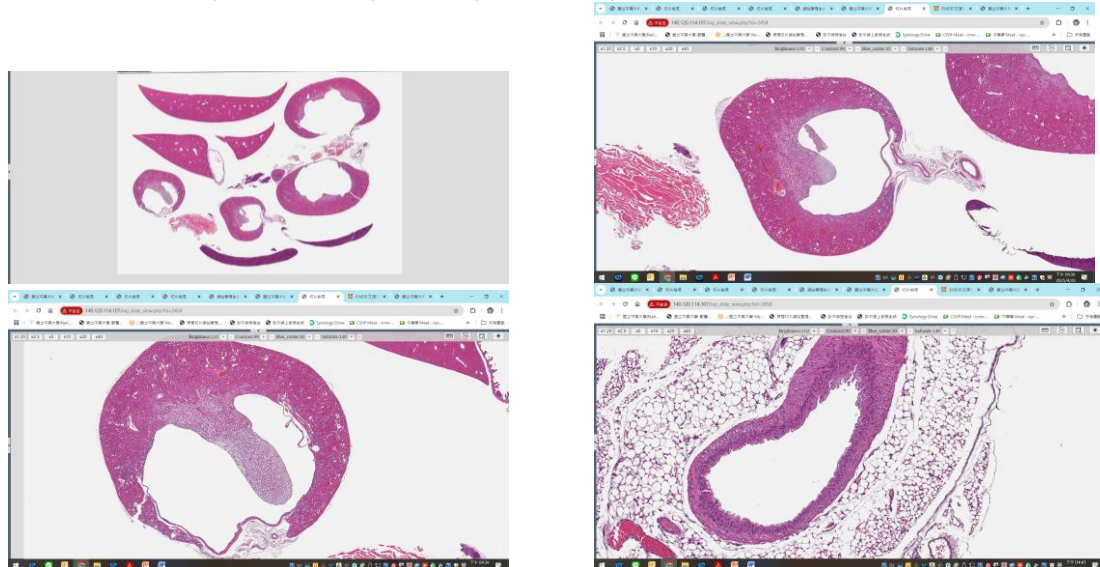
Glomeruli hypertrophy, mild

Mesangial matrix expansion (diffuse), mild

Diffuse thickening of glomerular, tubular and Bowman capsule thickening membranes, mild to moderate.

Tubulointerstitial fibrosis, minimal

Ureter: Dilation, obstructive, diffuse, moderate, chronic



Lab. examination:

Clinical Chemistry (Non-fasted samples)

Animal ID.	BW	AST	ALT	GLU	TP	ALB	BUN	CREA
		U/L	U/L	mg/dL	g/dL	g/dL	mg/dL	mg/dL
WT	24.2	58.5	32.5	246.2	5.7	4.3	21.1	0.06
T15	17.9	64.8	50.2	1075.5	5.8	3.8	64.0	0.11

Urinalysis (Urine test strip)

Glucose: >2000 ++++ mg/dL

Protein: 30 mg/dL +

SG: 1.030

Dx: Diabetic nephropathy, mild, with cytopathy, moderate bilateral hydronephrosis and hydroureter

切片名稱：Case 5. 113015

Case 5. CSVP 2025-3282 (113015, NTUCM LAC, Y.T. Tsai, I.S. Yu, and W.P. Chen)
Mouse, Brca1 (breast cancer associated gene 1) knockout, 10-month-old, female. The mouse revealed periocular and external auditory swelling, and a 1×0.8×0.8 cm, hyperkeratotic warty cutaneous mass.

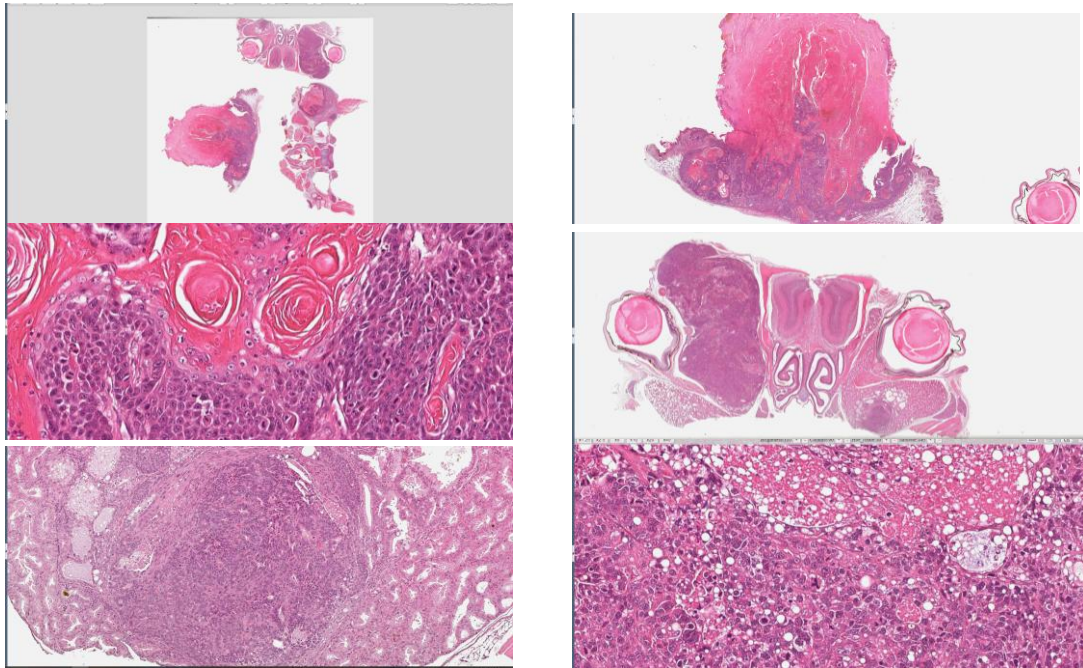
Morphologic diagnosis :

Haired skin : Squamous cell carcinoma

External auditory canal : Squamous cell carcinoma

Harderian gland, left side : Adenocarcinoma

Harderian gland, right side : Adenocarcinoma arising in cystic adenoma



Lab. examination:

Dx: Mouse model of Brca1 deficiency

切片名稱：Case 6. CM24-09013C

Case 6. CSVP 2025-3283 (CM24-09013, ADDC NCHU, Y.C. Hsu, Y.H. Lee, and H.Y. Chiou)

Nursery pigs, 8- to 9-week-old, showed clinical signs including growth retardation, occasional coughing, diarrhea, and icterus. The monthly mortality rate was below 5% with about 20-30% of the nursery pigs showing signs emaciation.

Morphologic diagnosis :

Lymphoid nodes: Lymphadenitis, granulomatous and eosinophilic, moderate to severe, diffuse, chronic, with severe lymphoid depletion, and basophilic intrahistiocytic cytoplasmic botryoid inclusion bodies.

Ileum: Ileitis, mild to moderate, diffuse, chronic, with mild villous blunting, marked lymphoid depletion, and basophilic intrahistiocytic botryoid inclusion bodies.

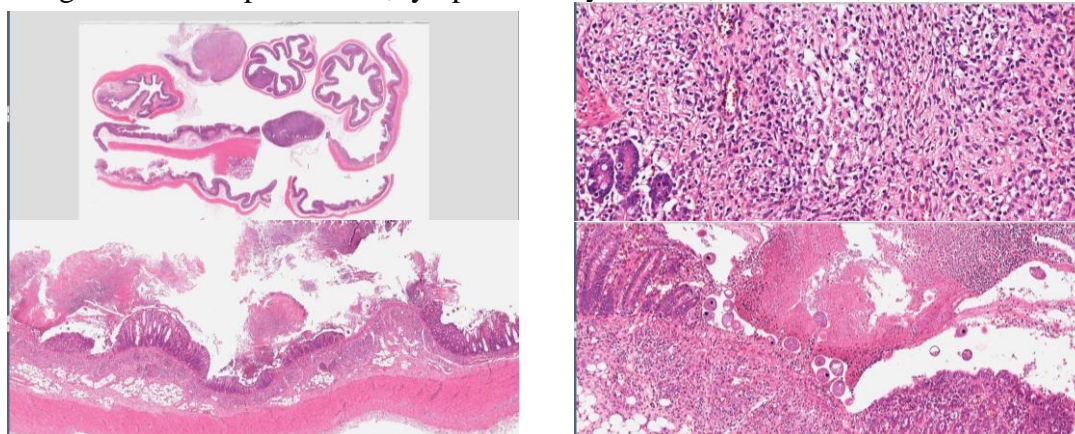
Cecum: Typhlitis, necrohemorrhagic and ulcerative, moderate, multifocal to coalescing, chronic, with intralesional *Balantidium coli*.

Colon: Colitis, necrohemorrhagic and ulcerative, moderate, multifocal to coalescing, chronic.

Tonsil: Lymphoid depletion, moderate, diffuse, with basophilic intracytoplasmic botryoid inclusion bodies.

Liver: Hepatitis, lymphohistiocytic, mild, multifocal, chronic.

Lungs: Interstitial pneumonia, lymphohistiocytic, mild, multifocal, chronic.



Lab. examination:

Polymerase chain reaction (PCR):

Porcine Circovirus Type 2 (PCV2): Positive

Mycoplasma suis (*Eperythrozoon suis*; EPY): Negative

Immunohistochemistry (IHC): Peyer's patch= PCV2 (+)

Microbiological Examination: Intestines: *Escherichia coli* (+)

qPCR:

PCV2 serum viral load (copies/ μ L)	
6-week-old pigs	8.97×10^5
8- to 10-week-old pigs	2.20×10^6
< 10^3 copies/ μ L: Weak positive, subclinically infected	
10^3 - 10^4 copies/ μ L: Positive, PCVD suspected	
10^4 copies/ μ L: Strong positive, PCVD	

Dx: Porcine Circovirus Type 2 Systemic Disease (PCV2-SD) in Nursery Pigs