

Chinese Society of Comparative Pathology

中華民國比較病理學會

第 91 次比較病理學研討會暨會員大會

泌尿系統疾病病理專題



主辦單位

Chinese Society of Comparative Pathology

中華民國比較病理學會

國立臺灣大學獸醫專業學院

中華民國 113 年 12 月 14 日(Dec. 14, 2024)

SCHEDULE

89th MEETING OF COMPARATIVE PATHOLOGY

中華民國比較病理學會 第 91 次比較病理學研討會暨會員大會
泌尿系統疾病 病理討論會

時間：113 年 12 月 14 日（星期六）

地點：國立台灣大學 獸醫專業學院 獸醫三館地下一樓會議室

電話：02-33663873

Time (時間)	Schedule (議程)			Moderator (主持)
9:00~9:20	Registration (報到)			
9:20~9:30	Opening Ceremony (致詞)			
9:30~10:30	專題演講	主講：三軍總醫院 病理部 趙載光主治醫師 題目：Diagnostic approach for unusual glomerular diseases		張晏禎 秘書長
10:30~11:10	Coffee Break (合照)			
11:10~11:40	Case 609	Shih, Chia-Wen (施洽雯) ¹ , Chen I-Ping (陳怡萍) ¹ ¹ Department of Pathology, Lotung Poh-Ai Hospital (羅東博愛醫院 病理科) ¹ 題目：Small cell carcinoma in urinary bladder		劉振軒 常務理事
11:40~13:00	午餐 及 第十屆第六次理監事會議			
13:00~13:30	Case 610	Chang, Chun-Yu (張淳瑜) ¹ ; Wang, Wen-Wei (汪紋緯) ¹ ; Liao, Jiunn-Wang (廖俊旺) ^{1,2} ; Chiou, Hue-Ying (邱慧英) ^{1,2} ¹ Animal Disease Diagnostic Center, National Chung Hsing University, Taichung, Taiwan (國立中興大學動物疾病診斷中心) ² Graduate Institute of Veterinary Pathobiology, College of Veterinary Medicine, National Chung Hsing University, Taichung, Taiwan (國立中興大學獸醫病理研究所) 題目：Renal squamous cell carcinoma and urothelial carcinoma in a dog		彭奕仁 理事
13:30~14:00	Case 611	Chang, Junn-Liang (張俊梁) ¹ ; Liu, Kuang-Ting (劉光庭) ² ; Chang, Yueh-Ching (張月清) ² ¹ Taipei Veterans General Hospital Taoyuan Branch (臺北榮民總醫院桃園分院) ² Department of Pathology and Laboratory Medicine, Taoyuan Armed Forces General Hospital (國軍桃園總醫院病理檢驗部) 題目：Primary testicular dedifferentiated liposarcoma		簡耀君 理事
14:00~14:30	Case 612	Jiang, Jia-Wei (江家瑋) ¹ ; Tsao, Wen-Tien (曹文恬) ¹ ; Luo, I-Chi (羅怡琪) ¹ ¹ HOPE Veterinary Pathology Diagnostic Center (霍普獸醫病理診斷中心) 題目：Renal hemangiosarcoma in a dog		賴銘淙 理事

14:30~15:00	Coffee Break		
15:00~15:30	Case 613	Peng, Yi-Jeng (彭奕仁)¹ ¹ Department of Pathology, Tri-Service General Hospital (三軍總醫院), National Defense Medical Center (國防醫學院) 題目：Papillary renal neoplasm with reverse polarity	邱慧英 常務理事
15:30~16:00	Case 614	Lo, Yu-Yi (羅好意)¹; Chong, Yat (張暉)¹; Shih, Cheng-Hsin (施正心)¹ ¹ Graduate Institute of Molecular and Comparative Pathobiology, School of Veterinary Medicine, National Taiwan University (國立台灣大學獸醫專業學院分子暨比較病理生物學研究所) 題目：Nephroblastoma in a cat	張俊梁 理事長
16:00~16:30	General Discussion (綜合討論)		張俊梁 理事長

目 錄

SCHEDULE	1
SPECIAL LECTURE (專題演講).....	5
CASE DIAGNOSIS	7
CASE NUMBER: 609	8
CASE NUMBER: 610	14
CASE NUMBER: 611	20
CASE NUMBER: 612	28
CASE NUMBER: 613	33
CASE NUMBER: 614	37
中華民國比較病理學會章程.....	41
中華民國比較病理學會第十屆理監事簡歷冊	46
中華民國比較病理學會會員名單	48
中華民國比較病理學會 113 年度工作計劃	51
中華民國比較病理學會 113 年度工作報告	52
中華民國比較病理學會資料庫使用須知	53
比較病理研討會病例分類一覽表	54
腫瘤	54
細菌	70
病毒	74
黴菌（含藻類）	77
寄生蟲（含原蟲）	78
立克次體	80
其他	80
會員資料更新服務	86

入會辦法	87
中華民國比較病理學會入會申請及會員卡	88

Special Lecture (專題演講)

Diagnostic Approach For Unusual Glomerular Diseases

趙載光醫師

國防醫學院醫學系教授

三軍總醫院病理部主治醫師

1. Crescentic (Rapidly Progressive) Glomerulonephritis

Type I (Anti-GBM Antibody)

Goodpasture Syndrome

Type II: (Immune Complex), Including Idiopathic, Postinfectious, Lupus Nephritis, IgAN And Henoch-Schonlein Purpura

Type III: (Pauci-Immune), ANCA-Associated, Idiopathic, Granulomatosis With Polyangiitis (Formerly Wegener Granulomatosis), Microscopic Polyangiitis

2. Membranoproliferative Glomerulonephritis (MPGN)

MPGN, Type I

MPGN, Type II (Dense Deposit Disease)

MPGN, Type III

3. C3 Glomerulopathies

4. MPGN With Immune Complex Deposition

5. Monoclonal immunoglobulin diseases of glomeruli



趙載光

學歷：國防醫學院醫學科學研究所博士

現職：三軍總醫院病理部主治醫師、三軍總醫院生物資料庫主任、

國防醫學院醫學系教授醫師

經歷：三軍總醫院病理部主任醫師

論文選錄：

1. Ching-Wei Wang, Hikam Muzakky, Nabila Puspita Firdi, Tzu-Chien Liu, Po-Jen Lai, Yu-Chi Wang, Mu-Hsien Yu, Tai-Kuang Chao (2024, May). Deep Learning to Assess Microsatellite Instability Directly from Histopathological Whole Slide Images in Endometrial Cancer. *npj Digital Medicine.* (Accepted).
2. Chen CL, Chao TK, Yeh FC, Wu CL, Wang CH. (2024, Mar). Chronic infective arthritis with osteomyelitis of the ankle due to *Pseudomonas aeruginosa* infection in a middle-age woman: A rare causative pathogen requiring vigilance. *Medicine*, 8;103(10):e37344. doi: 10.1097/MD.00000000000037344.
3. Ching-Wei Wang, Yu-Ching Lee, Yi-Jia Lin, Nabila Puspita Firdi, Hikam Muzakky, Tzu-Chien Liu, Po-Jen Lai, Chih-Hung Wang, Yu-Chi Wang, MuHsien Yu, Chia-Hua Wu, Tai-Kuang Chao (2023, Sep). Deep Learning Can Predict Bevacizumab Therapeutic Effect and Microsatellite Instability Directly from Histology in Epithelial Ovarian Cancer. *Laboratory investigation*, 2023 Sep 22;103(11):100247.
4. Ching-Wei Wang, Kai-Lin Chu, Hikam Muzakky, Yi-Jia Lin, Tai-Kuang Chao (2023, Aug). Efficient Convolution Network to Assist Breast Cancer Diagnosis and Target Therapy. *Cancers (Basel)*, 2023 Aug 6;15(15):3991.
5. Wang CW, Khalil MA, Lin YJ, Lee YC, Chao TK*. (2023, Jul). Detection of ERBB2 and CEN17 signals in fluorescent in situ hybridization and dual in situ hybridization for guiding breast cancer HER2 target therapy. *Artificial Intelligence in Medicine*, 2023 Jul;141:102568.

Case Diagnosis

91th MEETING OF COMPARATIVE PATHOLOGY

中華民國比較病理學會 第 91 次比較病理學研討會暨會員大會

泌尿系統疾病 病理討論會

民國 113 年 12 月 14 日

(閱片網址：<http://140.120.114.107/slidebarcenter.php?id=551>)

Case No.	Presenter	Slide No.	Diagnosis
Case 609	施洽雯	239215	Small cell carcinoma http://140.120.114.107/ivp_slide_view.php?id=2420
Case 610	張淳瑜	CS24-07169_2	Renal squamous cell carcinoma and urothelial carcinoma http://140.120.114.107/ivp_slide_view.php?id=2416
Case 611	張俊梁	121311	Primary testicular dedifferentiated liposarcoma (PTDDL) http://140.120.114.107/ivp_slide_view.php?id=2417
Case 611	江家瑋	23-3812	Renal hemangiosarcoma http://140.120.114.107/ivp_slide_view.php?id=2421
Case 612	羅妤意	NTU2024-129	Nephroblastoma http://140.120.114.107/ivp_slide_view.php?id=2419
Case 613	彭奕仁	24 25359A	Papillary renal neoplasm with reverse polarity http://140.120.114.107/ivp_slide_view.php?id=2418

Case Number: 609

Slide Number: 239215

Slide View: http://140.120.114.107/ivp_slide_view.php?id=2420

Abstract:

A 75-year-old man presented to our OPD of urology with the chief complaint of gross hematuria for days. Urine routine was performed and showed RBC: 16000/HPF (0-1/HPF), WBC: 1/HPF (0-5/HPF). Urine cytology was performed and showed some atypical cells with mild irregular in size and shape with mild enlarged round hyperchromatic nuclei, high N/C ratio and scant cytoplasm. Malignancy was diagnosed and highly suspected for small cell carcinoma. Immunocytochemical stain was performed and showed positive stain for synaptophysin. Small cell carcinoma was diagnosed. Then, cystoscopic examination was done and showed tumor in urinary bladder. TURBT (transurethral resection of bladder tumor) was performed and the histopathology confirmed the diagnosis of small cell carcinoma of urinary bladder. Extrapulmonary small cell carcinoma (SmCC) most commonly arise from the genitourinary (GU) or gastrointestinal (GI) tract. The frequency of GU location primary is much less compared to GI location. SmCC of the GU tract is a rare and aggressive malignancy. The most common sites of primary GU SmCC are the urinary bladder and prostate. A surveillance, epidemiology, and end results database analysis of 642 small cell carcinoma of urinary bladder (SmCCUB) patients (1991-2005) showed the incidence of SmCCUB increased significantly from 0.05 to 0.14 cases per 100,000 population; approximately 500 new cases of SmCCUB per year, representing 0.7% of all bladder malignancies. Preoperative urine cytology is beneficial in the diagnosis, cytologic diagnostic features are groups or individual small tumor cells (2-3X lymphocytes), scant cytoplasm, irregular, hyperchromatic nuclei, coarse chromatin, inconspicuous nucleoli, nuclear molding and indian file pattern. Crushed cells may be seen. Urine cytological differential diagnosis of SmCCUB is difficult, but it is very important to have a quick and accurate diagnosis of SmCCUB.



施洽雯

Chia-wen Shih

現職：

Chief of the Department of Pathology, Lo-Tung Poh-Ai Hospital

學歷：

1975-1981 Chung-Shan Medical University.

1986-1988 Institute of Pathology, National Defense University.

經歷：

1983-1985 Resident of the Department of Internal Medicine, Show-Chwan Memorial Hospital.

1988-1989 Resident of the Department of Pathology, Tri-Service General Hospital.

1989-1990 Chief resident of the Department of Pathology, Chung-Shan Medical University Hospital.

1990-1993 Chief of the Department of Pathology, Chung-Shan Medical University.

1993-present Chief of the Department of Pathology, Lo-Tung Poh-Ai Hospital.

1989-1990 Lecture, Chung-Shan Medical University.

1990-1993 Associate Professor, Chung-Shan Medical University.

1995-2022 Associate Professor, Tzu Chi University.

論文選錄：

1. Chiang MF, Tseng TK, Shih CW, Yang TH, Wu SY. Clinical and contrast-enhanced image features in the prediction model for the detection of small hepatocellular carcinomas. *J Cancer*. 2020 Oct 18;11(24):7166-7175. doi: 10.7150/jca.47245. PMID: 33193879; PMCID: PMC7646160.
2. Tsai, Yu-Hsiang, Chia-Wen Shih, and Ching-Wen Chiang. "Nasal Glomus Tumor Presenting as Epistaxis-Case Report." *台灣耳鼻喉頭頸外科雜誌* 55.4 (2020): 214-217. airiti Library. Web. 13 Nov. 2023. doi:10.6286/jtohns.202012_55(4).214

Shih, Chia-Wen (施洽雯), MD, MS¹; Chen, I-Ping (陳怡萍), MT, MS¹

¹ Department of Pathology, Lotung Poh-Ai Hospital (羅東博愛醫院病理科)

CASE HISTORY:

Signalment: 75-year-old man.

Clinical History:

A 75-year-old man presented to our OPD (outpatient department) of urology with the chief complaint of gross hematuria for days. Urine routine was performed and showed RBC: 16000/HPF (0-1/HPF), WBC: 1/HPF (0-5/HPF). Urine cytology was recommended. Three bottles of urine were sent to the department of pathology for cytologic examination and labeled as day 1, day 2 and day 3 respectively. The first day's urine cytology showed abundant BRCs with some neutrophils and histiocytes. The second day's urine cytology showed less RBCs and more neutrophils and histiocytes than the first day's urine. The third day's urine cytology showed some RBCs, many neutrophils and histiocytes and some atypical cells with mild irregular in size and shape with mild enlarged round hyperchromatic nuclei, high N/C ratio and scant cytoplasm. Malignancy was diagnosed and highly suspected for small cell carcinoma. Immunocytochemical stain was performed and showed positive stain for synaptophysin. Small cell carcinoma was diagnosed by cytology. Cystoscopic examination was done and showed tumor in urinary bladder. TURBT (transurethral resection of bladder tumor) was performed. The specimen was sent to the department of pathology for pathologic diagnosis. The specimen submitted consisted of 13 small tissue fragments measuring 0.3 x 0.3 x 0.2 cm, grayish-brown in color and soft in consistency.

Clinical Pathology:

BUN: 23 mg/dL (6-20 mg/dL), Creatinine: 1.3 mg/dL (0.7-1.3 mg/dL), RBC: 3.95x106/uL (4.2-5.4x106/uL), Hb: 11.1 gm/dL (14.0-18.0 gm/dL), Hct: 34.8 % (40-54%), Plt: 28.4 x104/dL (15-40 x104/dL), WBC: 7.1 x103/uL (4.5x103- 11.0x 103/uL).

CASE RESULT:

Histopathologic Findings:

Histopathological examination revealed sheets of neoplastic cells, irregular in size and shape, round or ovoid small hyperchromatic nuclei, indistinct nucleoli, scant cytoplasm and high N/C ratio. Prominent crushing artifact was also noted.

Immunohistochemistry:

Sections of tissue specimen were subjected for immunohistochemical evaluation. On immunohistochemical analysis, the neoplastic cells were positive for CK, CD56, chromogranin A and synaptophysin and negative for LCA, uroplakin and P63.

Differential diagnosis:

1. Lymphoma.
2. High grade urothelial carcinoma.
3. Small cell carcinoma.

Diagnosis: Small cell carcinoma, urinary bladder.

Comments:

Small cell carcinoma (SmCC) is part of a larger classification of high-grade neuroendocrine cancers. Primary SmCC most commonly arises from the lungs. SmCC can be found in various organs including esophagus, stomach, pancreas, appendix, colon, rectum, prostate, and urinary bladder etc. Extrapulmonary SmCC most commonly arise from the genitourinary (GU) or gastrointestinal (GI) tract. The frequency of GU location primary is much less compared to GI location. SmCC of the GU tract is a rare and aggressive malignancy. The most common sites of primary GU SmCC are the urinary bladder and prostate. The first report of small cell carcinoma of the urinary bladder (SmCCUB) was made in 1981 by Cramer et al.

SmCCUB comprises 0.48%-2% of all bladder cancers and prostatic SmCC comprises 0.5%-2% of all prostate cancers. A surveillance, epidemiology, and end results database analysis of 642 SmCCUB patients (1991-2005) showed the incidence of SmCCUB increased significantly from 0.05 to 0.14 cases per 100,000 population; approximately 500 new cases of SCCB per year, representing 0.7% of all bladder malignancies. Painless hematuria is the most common symptom of SmCCUB, and can be found in 90% of patients. They can also present with dysuria, abdominal pain, urinary obstruction. Predilection for males over females with 4:1 proportion. Most patients of SmCCUB are in the sixth to seventh decades of life with the average age about 67 years. 60% of the SmCCUB patients had a history of smoking.

The pathogenesis of SmCCUB is not well defined. Several hypotheses were proposed to explain the origin of SmCCUB. The most important hypotheses were: 1) Malignant transformation of bladder neuroendocrine cells gives rise to SmCCUB. 2) SmCCUB arises from urothelial metaplastic changes. 3) A more powerful theory suggests that the origin of SmCCUB may be a multipotential common stem cell that has the ability to differentiate into various cell types.

Histopathology of SmCCUB shows infiltrative neoplasm arranged as sheets with scant intervening stroma. The cells are small with scant cytoplasm, hyperchromatic nuclei with inconspicuous nucleoli. Nuclear crowding and crushing artifact are frequently seen. Extensive necrosis and high mitotic index are also frequently seen. 65% of SmCCUB patients were pure small cell while rest 35% had mixed small cell urothelial carcinoma. Immunohistochemical stain shows CD56, Synaptophysin and chromogranin A positivity. Preoperative urine cytology is beneficial in the diagnosis, although the

specificity is variable in different laboratory. Takada et al. reported that 67.4% of SmCCUB had class IV or V preoperative urine cytology, but SmCCUB was suspected in only three cases (6.9%). The cytologic diagnostic features are groups or individual small tumor cells (2-3X lymphocytes), scant cytoplasm, irregular, hyperchromatic nuclei, coarse chromatin, inconspicuous nucleoli, nuclear molding and indian file pattern. Crushed cells may be seen. Cytological differential diagnosis of SmCCUB is difficult because cell degeneration is prominent in urine specimen, but it is very important to have a quick and accurate diagnosis of SmCCUB.

The clinical behavior is very aggressive, with early lymph-node metastasis and liver, bone or peritoneal cavity deposits. 75% SmCCUB patients were diagnosed as limited stage disease while 25% were extensive stage disease by Veteran's administration staging. The majority of the SmCCUB patients were diagnosed in stage III (40%), while 10% patients were classified as stage IV by virtue of pathological node positivity. 25% of SmCCUB patients presented as metastatic disease up front with lung, liver, and bones and mediastinal nodal disease as the sites.

There is no standard therapy for SmCCUB because it is so rare. Options for local treatment include TURBT, RC (radical cystectomy), and radiation, similar to those for urothelial carcinoma. The management of limited disease has been historically defined as combination chemotherapy with radical surgery, however, few series reported the role of bladder preservation approaches with chemotherapy and radiotherapy. Significant benefit in overall survival (OS) and disease-free survival (DFS) with neoadjuvant chemotherapy (NACT) as compared to adjuvant chemotherapy while worst survival was seen in the patients who did not receive chemotherapy. This highlights the importance of incorporation of chemotherapy in the early part of management. The median survival was 18.5 months while median DFS was 17.1 months. OS at 2 years was 49% and DFS at 2 years was 51%. The median survival has been reported between 10 and 20 months with 5%–20% 5 year OS. The mean duration to recurrence was 11.3 months and mean duration to death was 5.5 months from the time of recurrence. The survival outcomes of the patients in relation to pure or mixed histology is reported variably as prognostic factor of outcome in existing literature. Few recent series have shown inferior survival in patients with pure histology of small cell carcinoma.

Conclusion:

Extrapulmonary small cell carcinoma is rare and SmCCUB amounts for a very small proportion (2.5%). SmCCUB is extremely rare and accounts for less than 1.0% of all primary bladder carcinomas. Diagnosis of SmCCUB needs detailed imaging, histopathological and immunohistochemical studies. Preoperative urine cytology is beneficial in the diagnosis. Urine cytological differential diagnosis of SmCCUB is difficult, but it is very important to have a quick and accurate diagnosis of SmCCUB. Overall prognosis is dismal despite aggressive multimodality. NACT followed by surgical resection has the best results and should be the standard of care for limited disease patients. Extensive disease patients should be managed with a combination of chemotherapy.

References:

1. Thota S, Kistangari G, Daw H, Spiro T. A clinical review of small cell carcinoma of the urinary bladder. *Clin Genitourin Cancer* 2013;11:73 7.
2. Koay EJ, Teh BS, Paulino AC, Butler EB. A surveillance, epidemiology, and end results analysis of small cell carcinoma of the bladder: Epidemiology, prognostic variables, and treatment trends. *Cancer* 2011;117:5325 33.
3. Chhabra S, Hegde P, Singhal P. Primary small cell carcinoma of the urinary bladder – Mini review of the literature. *Asian Pac J Cancer Prev* 2012;13:3549 53.
4. Lynch SP, Shen Y, Kamat A, Grossman HB, Shah JB, Millikan RE, et al. Neoadjuvant chemotherapy in small cell urothelial cancer improves pathologic downstaging and long term outcomes: Results from a retrospective study at the MD Anderson cancer center. *Eur Urol* 2013;64:307 13.
5. Siefker Radtke AO, Kamat AM, Grossman HB, Williams DL, Qiao W, Thall PF, et al. Phase II clinical trial of neoadjuvant alternating doublet chemotherapy with ifosfamide/doxorubicin and etoposide/cisplatin in small cell urothelial cancer. *J Clin Oncol* 2009;27:2592 7.
6. Nabi G, Singh I, Ansari MS, Sharma MC, Dogra PN. Primary small cell neuroendocrine carcinoma of urinary bladder: An uncommon entity to be recognized. *Int Urol Nephrol* 2001;33:637 40
7. Ahsaini M, Riyach O, Tazi MF, et al: Small cell neuroendocrine carcinoma of the urinary tract successfully managed with neoadjuvant chemotherapy. *Case Rep Urol* 2013:e598325.
8. Rupert V, Clifton MM, Fulmer BR, et al: Primary small cell carcinoma of the upper urinary tract: A case report. *Urol Case Rep* 2019; 27:100995.
9. Satoshi Takada , Motokiyo Yoshikawa, Yukinari Hosokawa, Yoshiki Hayashi, Kiyo hide Fujimoto, Yoshihiko Hirao: Small cell carcinoma of the urinary bladder detected by urinary cytology : a case report. 2010 Mar;56(3):173-5.
10. Shahab N: Extrapulmonary small cell carcinoma of the bladder. *Semin Oncol* 2007; 34:15-21.
11. Ismaili N: Small-cell carcinoma of the genitourinary tract: A point of view. *Curr Oncol* 2016; 23:320.
12. Wang G, Xiao L, Zhang M, et al: Small cell carcinoma of the urinary bladder: A clinicopathological and immunohistochemical analysis of 81 cases. *Hum Pathol* 2018; 79:57-65.
13. Siefker-Radtke AO, Dinney CP, Abrahams NA, et al: Evidence supporting preoperative chemotherapy for small cell carcinoma of the bladder: A retrospective review of the M. D. Anderson cancer experience. *J Urol* 2004; 172:481-484.
14. Shah I, Patel D, Suryanarayana U: Small cell carcinoma—Urinary bladder. *J Radiat Cancer Res* 2022; 13:85.
15. Choong NW, Quevedo JF, Kaur JS: Small cell carcinoma of the urinary bladder: The Mayo Clinic experience. *Cancer* 2005; 103:1172-78.
16. Bex A, de Vries R, Pos F, et al: Long-term survival after sequential chemoradiation for limited disease small cell carcinoma of the bladder. *World J Urol* 2009; 27:101-6.

Case Number: 610

Slide Number: CS24-07169_2

Slide View: http://140.120.114.107/ivp_slide_view.php?id=2416

Abstract:

A renal tumor was identified in an 11-year-old female golden retriever, leading to nephrectomy of the right kidney. Gross examination showed irregular, encapsulated masses, while histopathology revealed a poorly demarcated squamous cell carcinoma (SCC) occupying 70–80% of the kidney, extending into the perirenal adipose tissue. The carcinoma was moderately differentiated with hallmark features of squamous cells, intercellular bridges, keratin pearls, and significant desmoplastic reaction. The pelvis and ureter displayed high-grade urothelial carcinoma (UC) invading the renal tissue, with immunohistochemistry indicating CK7 and uroplakin III positivity in the urothelial regions but not in the renal SCC, suggesting two separate tumors rather than a UC-derived SCC. This case underscores the diagnostic complexity of renal tumors with both SCC and UC components and highlights the need for further investigation into effective treatments for renal SCC in domestic animals.

Keywords:

canine, kidney, squamous cell carcinoma, urothelial carcinoma



張淳瑜

Chun-Yu Chang

現職：

國立中興大學動物疾病診斷中心 病理獸醫師

學歷：

國立中興大學獸醫學系 學士

經歷：

國立中興大學動物疾病診斷中心 病理獸醫師

Chang, Chun-Yu (張淳瑜), DVM¹; Wang, Wen-Wei (汪紋緯), DVM¹; Liao, Jiunn-Wang (廖俊旺), DVM, PhD^{1,2}; Chiou, Hue-Ying (邱慧英), DVM, PhD^{1,2}

¹ Animal Disease Diagnostic Center, National Chung Hsing University, Taichung, Taiwan

² Graduate Institute of Veterinary Pathobiology, College of Veterinary Medicine, National Chung Hsing University, Taichung, Taiwan

CASE HISTORY:

Signalment: A 11-year-old, female, golden retriever

Tumor mass in the kidney was diagnosed in clinic on 28th June, and nephrectomy was performed on 8th July. The submitted specimen was right kidney and ureter.

Gross Findings:

The size of the kidney specimen measured 6.5 cm × 4.0 cm × 4.0 cm, with an irregular shape, encapsulated by fibrous tissue, and mottled dark discoloration. Some adipose and soft tissues were attached. The ureter appeared well-developed. On the cut surface, there were firm, irregular nodule-like lesions, yellowish-white to grey, or dark red, ranging from 0.4 to 2.2 cm in diameter, expanding within the renal parenchyma.

CASE RESULT:

Histological Findings:

Right Kidney:

The specimen was sectioned into six slices. Subgrossly, basophilic to amphophilic, highly cellular masses occupy approximately 70–80% of the renal tissue. These masses are unencapsulated and poorly demarcated, replacing the majority of the normal renal parenchyma, which is only sparsely retained and compressed at the cortical edge. Isolated remnants of renal structures, including Bowman's capsule and renal tubules, are scattered throughout the neoplastic areas. The epithelial neoplastic cells form in cords, trabeculae, island or lobular patterns, surrounded by abundant mature desmoplastic tissue. The islands and confluent trabeculae are composed of layers of polygonal or squamous cells with a gradient transition, where basaloid cells at the periphery transition into more eosinophilic, keratinized cells centrally and sometimes keratin pearls. The tumor cells in lobular pattern have distinct cell border and prominent intercellular bridges. Approximately 10% of the examined central areas consist of acantholytic and necrotic cells intermixed with degenerative neutrophils rather than keratinized structures. Neoplastic cells demonstrate anisokaryosis and anisocytosis, and the nucleus to cytoplasm ratio is moderate. The nuclei are round to ovoid, with stippled chromatin and obvious nucleoli, and 1-2 mitoses per high power field. In certain regions, fibrotic reactions exceed the cellular tumor mass, particularly in areas where tumor cells are organized

into cords or nests with less cell layers, or single cell that resemble the islands and trabecular areas' periphery basaloid cells losing its epithelial polarity. The remnant renal tubules may be ectatic and contain eosinophilic-proteinaceous to hyaline cast accumulation. Within the central mass, necrotic foci are prominent, comprising 20–30% of the affected kidney, with moderate neutrophilic and lymphocytic infiltration observed within the neoplastic regions. Tumor penetrates the renal capsule, with variable-sized neoplastic islands infiltrating the peri-renal adipose tissue. Some dilated lymphatic or vascular channels contain clusters of suspected tumor cells.

Pelvis and ureter:

The pelvic mucosa exhibits diffuse transitional cell thickening, with layering increased to 7–12 cell layers. In regions of the pelvis, the neoplastic cells invade the muscular layer or adjacent renal tissue. This inward growth creates multilayered folds, lobular, tubular patterns separated by fibrovascular stroma. The NC ratio decreases as the layer go from the central or luminal, to the umbrella (superficial) layer, and gradient color shift from basophilic to eosinophilic or pale cytoplasm, with round to oval nucleus. Marked cell atypia and nuclear pleomorphism suggest its malignancy. There are prominent nucleoli, disorganized basal cell layer, and 0-1 mitoses per high power field. Occasionally, the cytoplasm shows round vacuole formation with signet ring cells or eosinophilic foamy material accumulating in the cytoplasmic vacuoles, forming Melamed-Wolinska bodies, which displace the nucleus toward the cell periphery.

The mucosa of the ureter exhibit relatively benign differentiation with lesser degree of cell atypia and disorientation, although the urothelium still displays diffuse proliferation, with layering exceeding 7 cells. The tumor cells are polygonal to elongate, with round, oval nuclei and have either vacuolated or eosinophilic cytoplasm.

Differential diagnoses:

1. Kidney: Renal squamous cell carcinoma/ Urothelial carcinoma with squamous differentiation
2. Pelvis and ureter: Urothelial carcinoma

Immunohistochemistry:

1. CK7 and uroplakin III:

The neoplastic urothelium in ureter and pelvis exhibit diffusely cytoplasmic brown staining, with a greater intensity at the apical border. Similarly, UP III, shows strong membranous immunoreactivity that is specific to terminally differentiated superficial urothelial cells. Both stains, however, are negative in the kidney tissue, where most of the squamous changes occur.

2. P40:

Approximately 70–80% of the nuclei within the renal squamous differentiated neoplasm exhibit DAB brown staining, indicating strong positivity. The urothelial neoplasm, particularly in the basal layer, as well as the normal transitional epithelium in the ureter and pelvis, also show strong positive staining. In contrast, the remnant renal tubules remain negative.

3. Ki67:

Most of the nuclei, especially those of the basal layer, of carcinomas in renal parenchyma, pelvis, ureter are stained brown, indicating strong positivity with Ki67 proliferation indexes of approximately 90%, 4.2%, 10%, respectively.

Final diagnosis

1. Squamous cell carcinoma, moderately differentiated (grade 3), right kidney
2. Urothelial carcinoma, high grade, right pelvis and ureter

Discussion

In domestic animals, urothelial carcinoma (UC) accounts for about 5% of primary renal tumors in dogs, and 9% in cats.¹ Squamous cell carcinoma (SCC) is even less common, comprising 1–2% of cases, with the majority located in the renal pelvis. In humans, SCC of the renal pelvis is extremely rare and has a poor prognosis, representing only 0.5–1% of all urothelial cancers.²

Most urinary SCC cases are associated with the renal pelvis. When SCC appears in the renal parenchyma, it is generally thought to have metastasized from the pelvis or lower urinary tract rather than originating in the kidney.³ Histological features such as intercellular bridges and keratin pearls define the squamous phenotype, but diagnostic challenges arise due to the potential for metaplastic transformation of UC into SCC. When dysplastic urothelium is present in the pelvis, the diagnosis favors primary urothelial neoplasm with squamous differentiation. However, if urothelium is normal, primary renal SCC should be suspected.^{4,5} Nevertheless, such criteria and cut-off standard are not described in domestic animals yet.⁷

In the storyline of UC transforming into SCC, such metaplastic to dysplastic changes is thought to be a consequence after continuous irritation, supported by the findings of clinical relation with renal calculi, chronic inflammation. And in human medicine, though still rare, but few reports still express the finding of a strong association with renal stones or chronic inflammation, ultimately, inducing renal pelvis SCC that extends to parenchyma.³ This sequence of events suggests a reasonable progression of the disease. But neither stone-like structure nor tubular cast were observed in our specimen, either histologically or grossly.

In our case, the malignancy sequentially increases as the urinary tract goes upward. UC in ureter exhibits better differentiation than the urothelium at renal pelvis. And it dramatically changes into squamous phenotype in most of the renal parenchyma. To clarify SCC's origin, staining was performed with CK7 and uroplakin III, but no positive reaction was observed in the medulla or cortex. Even nests or cords with lower cell layers and less squamous differentiation were negative. However, the presence of dysplastic urothelium in the pelvis and ureter complicates the determination of SCC's origin. A definitive diagnosis of primary renal SCC would require confirmation of normal urothelium in these areas to exclude the possibility of UC transforming into SCC, which is not the case here. At this stage, the most consistent interpretation points to a primary urothelial neoplasm with squamous differentiation. Paradoxically, the UC—though potentially the primary site—is less malignant and

remains in the early stages of neoplastic development. Despite some areas of normal urothelium in the pelvis, the kidney's SCC appears to have progressed independently over a longer period, suggesting an abrupt contrast in growth patterns. That is, our better revision on this case would involve two distinct incidents: UC in the pelvis and ureter, and SCC in the kidney, with SCC unlikely to have arisen from UC.

Due to limited case reporting, standardized management protocols for renal SCC are lacking in both human and animal medicine. Generally, radical nephrectomy or nephroureterectomy is recommended, though parenchyma-sparing surgeries are considered for unifocal disease. Cisplatin-based chemotherapy and radiotherapy may be administered for advanced cases, though no survival benefit has been consistently observed, underscoring the importance of early diagnosis.⁶

References

1. Donald JM, et al. Tumors of urinary system. In: Tumors of Domestic Animals, 5th ed, Wiley-Blackwell, USA, 656-677, 2017.
2. Blacher EJ, Johnson DE, Abdul-Karim FW, et al. Squamous cell carcinoma of renal pelvis. In: Urology, USA, 124-126, 1985.
3. Bandyopadhyay R, Biswas S, Nag D, Ghosh AK. Squamous cell carcinoma of the renal pelvis presenting as hydronephrosis. *J Cancer Res Ther* **6**:537-539, 2010.
4. Sahoo TK, Das SK, Mishra C, et al. Squamous cell carcinoma of kidney and its prognosis: A case report and review of the literature. *Case Rep Urol*, 2015.
5. Variar P, Misra A, Siraj F. Primary squamous cell carcinoma of the renal pelvis: A case report series. *Cureus* **16**, 2024.
6. Brits NF, Bulane S, Wadee R. Primary squamous cell carcinoma of the kidney: a case report and review of the literature. *African J Urol* **26**:1-7, 2020.
7. Ludwig L, Husnik R, Rätsep E, et al. Unilateral primary carcinoma of the kidney with central nervous system invasion and vertebral lysis in a cat. *JFMS open reports* **8**, 2022.

Case Number: 611

Slide Number: 121311

Slide View: http://140.120.114.107/ivp_slide_view.php?id=2417



張俊梁

Junn-Liang Chang

現職：

國軍桃園總醫院 病理檢驗部 顧問醫師
國防醫學院 病理學暨寄生蟲學系所及三軍總醫院病理部 兼任教授
銘傳大學健康管理學院 兼任教授
臺灣病理學會會員暨解剖病理專科醫師
臺灣臨床病理暨檢驗醫學會會員暨臨床病理專科醫師
中華民國精準醫學學會員暨專科醫師
臺灣醫學會會員、中華醫學會會員
中華民國比較病理學會第十屆理事長

學歷：

國防大學國防醫學院醫學科學研究所博士

經歷：

三軍總醫院 病理部 住院醫師、住院總醫師、主治醫師
國軍桃園總醫院解剖病理專科醫師、臨床病理專科醫師
國軍桃園總醫院 病理檢驗部主任、主治醫師
國軍桃園總醫院 社區醫學部部主任(兼代病理檢驗部主任)
國軍桃園總醫院 醫療部部主任兼代病理檢驗部主任
台北榮民總醫院 桃園分院 病理檢驗科顧問醫師暨支援醫師
中華民國比較病理學會第四、五、六、七、八、九屆理事
國防醫學院、銘傳大學、中原大學兼任助理教授、副教授
臺灣臨床病理暨檢驗醫學會第十一屆品管委員會委員
國軍桃園總醫院 病理檢驗部 (TAF 醫學實驗室-Med Lab 1554) 部主任醫師
國軍桃園總醫院 共同醫學研究實驗室主任

論文選錄:

1. Chiu YF, Wu CC, Kuo MH, Miao CC, Zheng MY, Chen PY, Lin SC, Chang JL, Wang YH, Chou YT. Critical role of SOX2-IGF2 signaling in aggressiveness of bladder cancer. *Sci Rep.* 2020 May 19;10(1):8261.
2. Chang HJ, Lin KR, Lin MT, Chang JL. Associations Between Lifestyle Factors and Reduced Kidney Function in US Older Adults: NHANES 1999-2016. *Int J Public Health.* 2021 Jul 15;66:1603966.

Chang, Junn-Liang (張俊梁), MD, PhD¹; Liu, Kuang-Ting (劉光庭), MT, MS²; Chang, Yueh-Ching (張月清) MT, MS²

¹ Taipei Veterans General Hospital Taoyuan Branch (臺北榮民總醫院桃園分院)

² Department of Pathology and Laboratory Medicine, Taoyuan Armed Forces General Hospital, Taoyuan City, Taiwan (國軍桃園總醫院病理檢驗部)

CASE HISTORY:

Clinical history:

An 83-year-old patient presented to our hospital with a painless swelling of the left scrotum that had persisted for 1 year. On admission, his vital signs were as follows: temperature 36.8°C, pulse rate 61/min, respiratory rate 20/min, and blood pressure 123/62 mmHg. His height was 161 cm, and weight was 62 kg. The general appearance showed the patient to be alert but appearing unwell.

One year prior to this presentation, he was diagnosed with a minimal left hydrocele and did not undergo treatment at that time. On palpation, no painful fluid collection was noted. His medical history included a transurethral resection of the prostate (TURP) for benign prostatic hyperplasia (BPH) 10 years ago at a local hospital, a right inguinal herniorrhaphy repair 5 years ago, and a craniotomy at a local medical center 15 years ago for a right parietal meningioma.

Laboratory results and Imaging study:

Laboratory investigations included a routine urinalysis and complete blood count (CBC), which showed hemoglobin (Hgb) at 12.9 g/dL (reference range 14-18) and white blood cells (WBC) at 4510/uL (reference range 4180-9380). Biochemical tests, including lactate dehydrogenase (LDH), blood urea nitrogen (BUN), and creatinine, were within normal limits. Tumor markers, including carcinoembryonic antigen (CEA), human chorionic gonadotropin (HCG), alpha-fetoprotein (AFP), and prostate-specific antigen (PSA), were also within normal ranges.

Scrotal ultrasound revealed a well-defined, homogeneous hyperechoic mass measuring approximately 7 x 6 x 6 cm with a septum in the left scrotum, suggesting a possible fat component. No involvement of testicular parenchyma was identified. Subsequently, staging with an abdominal and pelvic CT scan displayed no lymph node enlargement or signs of metastasis.

The differential diagnosis for the scrotal mass included adenomatoid tumor, leiomyoma, cystadenoma, spermatocele, rhabdomyosarcoma, leiomyosarcoma, fibrosarcoma, liposarcoma, and carcinoma. The patient was treated surgically with a radical orchectomy of the left testis, without regional lymph node dissection, and was discharged in good clinical condition.

Gross Findings:

Macroscopically, the excised left orchectomy specimen measured 12 x 7 x 6.5 cm and weighed 200 g. Sectioning revealed a well-circumscribed, encapsulated paratesticular mass with an eccentric solid component, measuring 7 x 7 x 6.5 cm, located between the tunica vaginalis and tunica albuginea. The

mass was firm to semi-solid in consistency, predominantly lobulated with brown to yellow-gray coloration, and had focal gelatinous areas, without evidence of hemorrhage or necrosis. The testicular parenchyma showed atrophic changes, measuring 3 x 2 x 1.5 cm, and was compressed by the paratesticular mass. At the periphery, residual left testicular parenchyma, up to 3.5 cm in diameter, appeared brown with increased firmness and was covered by a thickened tunica albuginea. The attached spermatic cord, measuring 4 x 4 x 1.5 cm, showed no abnormalities on serial sections.

CASE RESULT:

Histopathologic findings:

Microscopically, fibroblastic cells with moderate pleomorphism were arranged in a herringbone pattern, with some areas displaying focal whorled or storiform patterns and thick-walled vessels. Various regions exhibited distinct features, including adipose-like areas with lipoblasts and 'chicken-wire' vasculature. Areas with leiomyomatous differentiation and moderate atypia were also observed, along with solid regions showing marked nuclear pleomorphism and giant multinucleated tumor cells. No vascular emboli were present. The remaining testicular parenchyma demonstrated fibrohyalinization and atrophy of seminiferous tubules, with no tumor invasion. Sections of the distal surgical margin of the spermatic cord were negative for tumor involvement.

Differential diagnoses:

- Leiomyosarcoma
- Malignant peripheral nerve sheath tumor (MPNST):
- Fibrosarcoma
- Undifferentiated pleomorphic sarcoma (Malignant fibrous histiocytoma, MFH)
- Liposarcoma

Immunohistochemistry:

Immunohistochemical (IHC) staining, these tumor cells demonstrated the following: an intense and diffuse positive nuclear reaction for Ki-67 in 60% of nuclei, indicating a high proliferative index; an intense positive nuclear reaction for MDM2 and CDK4 in lipoblastic tumor cells; an intense positive nuclear reaction for p53 in 70% of nuclei (overexpression pattern); focal positive nuclear staining for p16 in tumor cells; intense cytoplasmic positivity for vimentin in tumor cells; and focal staining for glial fibrillary acidic protein (GFAP) and smooth muscle actin (SMA). Since lymph nodes were not metastatic in CT images, so lymph node invasion was not assessable and thus was not reported.

Anatomic diagnosis:

The pathological diagnosis showed suggestive of features of
Paratesticular, Lt., radical orchectomy: Dedifferentiated liposarcoma (PTDDLP)
paratesticular dedifferentiated liposarcoma with low & high grade (fibrosarcoma or MFH patterns with or without myxoid change, heterologous elements).

Testis, epididymis, spermatic cord, margins & cut ends of tumor showed free from tumor involvement.

According to the French Federation of Cancer Centers Sarcoma Group (FNCLCC) grading system, the tumor differentiation scored 3 points, the mitotic count scored 2 points, and tumor necrosis scored 1 point. The final score of 6 points corresponded to a grade 2 classification. Based on the tumor's maximum diameter (7 cm) and the absence of distant metastases at diagnosis, the 8th edition of the AJCC pathological TNM staging classified it as pT2N0M0, G2 (high grade), corresponding to stage IIIA.

Follow-up and workup:

After surgery, the patient recovered uneventfully. He was referred to the medical oncology team for further appropriate postoperative management. Because the patient was elderly, the family members did not agree to receive further local radiotherapy or adjuvant chemotherapy. Twelve years after surgery, the patient has continued to be followed-up at GU-OPD after discharge and has not experienced local recurrence or distant metastasis.

Discussion:

Paratesticular sarcomas are defined as tumors originating in the scrotum and include the epididymis (4%), spermatic cord (76%), and vaginal tunic (20%). It is difficult to identify the origin given the size of the tumor and the degree of adhesion. Most occur in adults between the ages of 50 and 60. Data on the exact pathogenic mechanism are scarce, but it is known to be formed de novo from connective tissue and not by malignant transformation of a preexisting lipoma.

The typical clinical presentation includes inguinal edema or a unilateral scrotal mass, which may or may not be painful and is occasionally accompanied by hydrocele. Due to nonspecific symptoms, it is essential to preoperatively differentiate these masses from inguinal hernia, hematocoele, hydrocele, lipoma, epididymitis or orchiepididymitis, tuberculosis, and malignant testicular lesions. Generally, these tumors are asymptomatic for many years, with symptom duration ranging from 1 week to 5 years. They primarily affect older males, with peak incidence around age 70; our case involved an 83-year-old man, though cases have also been documented in younger individuals.

PTDDLP is a malignant tumor that changes its shape from a well-differentiated liposarcoma to a non-liposarcomatous form, and non-lipogenic malignant components. High grade DDLP. Well differentiated and dedifferentiated components are often both present and can have abrupt or gradual transitions. Less common of the low grade DDLP resembling fibromatosis or well differentiated fibrosarcoma. Typically, inguinal and scrotal masses are evaluated using ultrasound to distinguish between intratesticular and extratesticular locations, as well as between solid and cystic masses. On ultrasound, these masses typically appear hypervascular and heterogeneous, with hyperechoic areas depending on the amount of intratumoral adipose tissue. However, it is difficult to differentiate between a lipoma and a well-differentiated liposarcoma. Contrast-enhanced CT is the most commonly used and useful primary imaging method for diagnosing possible soft tissue sarcomas in the trunk

and pelvis. Magnetic resonance imaging (MRI) is reserved for patients who are allergic to iodinated contrast agents. Additionally, CT is valuable for establishing tumor location, staging, and post-therapeutic follow-up, as in our case.

In this case, clinical physical examination and ultrasound examination suspected scrotal cysts and lipomas, but liposarcoma was not suspected. Therefore, CT and MRI were not performed to confirm the diagnosis. The pathological diagnosis of the tissue sent for examination after surgery was confirmed to be PTDDLP. Further staging imaging examinations are performed using computed tomography. The imaging appearance of the inguinal-scrotal region in association with no adenopathy and secondary bone findings led to the establishment of the initial surgical treatment: the resection of the left radical orchectomy without the excision of the inguinal regional lymph nodes. The final pathological diagnosis was PTDDLP, and then abdomen with pelvic-CT scan was performed, and no local lymphadenopathy or distant metastasis was found.

Imaging techniques like ultrasound and MRI are useful for assessing tumor features, but biopsy and IHC testing (especially for markers like MDM2 and p53) confirm the diagnosis and provide insight into tumor aggressiveness. The main way of metastasis of such a tumor is by contiguous extension through the inguinal canal into the abdominal cavity, the extension by hematogenous and lymphatic route being rarer.

Histologically, molecular characterization for genetic analysis—particularly identifying MDM2 and CDK4 amplifications—is crucial, as these biomarkers assist in diagnosis and can potentially influence treatment options. Genetic profiling may reveal novel therapeutic targets, as dedifferentiated liposarcomas sometimes exhibit unique responses to targeted therapies based on their molecular features. PTDDLPs display diverse histological characteristics, typically with a mix of well-differentiated and high-grade dedifferentiated components. Histopathological evaluation confirms the diagnosis by demonstrating MDM2 amplification, a key marker for PTDDLP. IHC often reveals CDK4 and MDM2 amplification, helping to distinguish PTDDLP from other tumors. Additional molecular testing, such as CDK4 and MDM2 immunostaining, further aids in confirming the diagnosis and assessing malignancy. The immunohistochemical trio of CDK4, MDM2, and p16 is a useful ancillary diagnostic tool that provides strong support in distinguishing WDLs and DDLs from other adipocytic neoplasms and is potentially more sensitive than previously assessed combinations of CDK4 and MDM2. p16 was the most sensitive and specific marker for detecting WDL/DDL, and the combination of CDK4 and p16 is of more discriminatory value than the combination of either with MDM2, the least sensitive and specific of the 3 markers.

Management typically involves radical orchidectomy and complete local excision with clear margins due to the risk of local recurrence. The recommended approach is wide local excision and high ligation of the spermatic cord. Adjuvant treatments, such as radiotherapy, may be considered, especially in high-grade cases, although chemotherapy has not shown definitive benefit for local control. Long-term follow-up is essential due to the high recurrence rates associated with DDLPS. Negative margins are an essential factor for non-recurrent survival.

Dedifferentiation is a time-dependent process in 10 to 15% of well-differentiated forms, the average period being 7.7 years, and the 5-year survival rate is 28%. The dedifferentiated subtype is the most worrying variant in terms of aggressive evolution and early recurrence. The areas of dedifferentiation have various aspects, but most frequently resemble undifferentiated pleomorphic sarcoma and high-grade or intermediate-grade myxofibrosarcoma. In our case, areas with a fascicular appearance, with a “Herringbone” or whorled formation pattern, accentuated pleomorphism and the presence of multinucleated giant cells were identified.

Prognostic factors, such as tumor size (>5 cm) and invasion depth, are critical in assessing the risks of recurrence and metastasis. Postoperative and post-diagnostic management includes imaging follow-up at 3, 6, 12, and 24 months, especially given the high risk of local recurrence in this category of malignancies, with follow-up extending up to 10 years as mandatory. The 5-year and 10-year disease-specific survival rates for spermatic cord sarcoma are 75% and 55%, respectively. The prognosis for dedifferentiated liposarcoma (DDL) is generally poor, particularly in older patients. Due to the aggressive nature of this disease, recurrence and metastasis are common, often involving retroperitoneal and pleural regions. The limited efficacy of treatments, such as doxorubicin, underscores the need for improved therapeutic strategies. In discussing primary testicular dedifferentiated liposarcoma (PTDDLP) in an 83-year-old male, key considerations include the diagnostic challenges and the importance of histological and imaging insights. Early imaging (ultrasound, CT, and MRI) and biopsy are essential for distinguishing benign conditions from malignant soft tissue sarcomas like dedifferentiated liposarcoma.

A case report of an 83-year-old patient with PTDDLP details similar disease progression and treatment challenges. Management recommendations for this patient included a combination of surgery and adjuvant chemotherapy; however, the patient's family declined these options. Such studies emphasize that physicians should consider malignancy in the differential diagnosis of inguinal and scrotal masses to avoid delays in detection and improve outcomes.

Studies highlight that the prognosis for PTDDLPs significantly worsens when diagnosis and treatment are delayed, as delayed cases often metastasize to areas such as the retroperitoneum or pleura. Long-term follow-up is essential due to the high recurrence rates, with reported five-year survival rates varying significantly but reaching up to 75% in some studies. Prognostic factors such as tumor size, cellular differentiation, and invasion depth play critical roles. Our patient, an 83-year-old, benefited from timely detection and early surgical treatment. However, the patient's family declined further treatment, including local radiotherapy or adjuvant chemotherapy after surgery. The patient has been followed up in our urology clinic for 10 years post-surgery and has shown no signs of recurrence or distant metastasis to date.

This case highlights the importance of a quick diagnosis, starting with appropriate imaging investigations. The final diagnosis is guaranteed only by corroborating the histopathological and IHC aspects with the clinical ones. The chromogenic *in situ* hybridization (CISH) test has a complementary role, also confirming the diagnosis established in the usual staining. The case of the

83-year-old man illustrates underlining the importance of regular follow-ups and consideration of novel therapeutic approaches.

Conclusion

PTDDLP is challenging to diagnose and treat due to its rarity, potential size, and aggressive nature. Comprehensive surgical resection is the preferred treatment, often supplemented by radiotherapy to improve outcomes. Regular follow-up is essential due to the high recurrence risk associated with these tumors. In elderly patients with paratesticular masses, especially those of advanced age, early identification and proactive management of dedifferentiated liposarcoma (DDL) are crucial for improving survival outcomes.

References

1. Wadieh DA, Ormanov D, Genchev T, Appukutty S. Paraneoplastic production of human chorionic gonadotropin by paratesticular dedifferentiated liposarcoma with rhabdomyosarcomatous differentiation. *BMJ Case Rep.* 2024 Aug 31;17(8):e254128.
2. Keles A, Arıkan O, Keser F, Yıldırım ANT, Yıldırım A. Paratesticular Dedifferentiated Liposarcoma with Rhabdomyoblastic Differentiation: A Case Report and Review of the Literature. *Prague Med Rep.* 2023;124(4):449-455.
3. BDeacu M, Aschie M, Bosoteanu M, Vamesu S, Baltatescu GI, Cozaru GC, Orasanu CI, Voda RI. Rare paratesticular localization of dedifferentiated liposarcoma: Case report and review of the literature. *Medicine (Baltimore)*. 2023 Mar 17;102(11):e33265.
4. Azizi MH, Rizuana IH, Wong YP, Sidek K, Fam XI. Giant paratesticular dedifferentiated liposarcoma with intraabdominal extension: a case report. *Front Oncol.* 2023 Jul 26;13:1216776.
5. Deacu Mariana, Aschie Mariana, Bosoteanu Madalina, Vamesu Sorin, Baltatescu, Gabriela-Izabela, Cozaru, Georgeta Camelia, Orasanu Cristian Ionut, Voda Raluca Ioana. Rare paratesticular localization of dedifferentiated liposarcoma: Case report and review of the literature. *Medicine* 102(11):p e33265, March 17, 2023.
6. Patton A, McKenney JK, Alruwaii FI, Angulo KA, Fuller LD, Calvaresi E, Billings SD, Goldblum JR, Fritchie KJ. Paratesticular Dedifferentiated Liposarcoma with Epithelioid Features: A Diagnostic Pitfall. *Int J Surg Pathol.* 2023 Aug;31(5):721-727.
7. Suto H, Inui Y, Okamura A. Case report: Paratesticular dedifferentiated liposarcoma with poor prognosis. *Front Oncol.* 2022 Dec 1;12:1085794.
8. 2022C=Machado I, Martí Ibor E, Berbegall AP, Alcácer Fernández-Coronado J, Claramunt R, Duarte Novo JE, Mosquera Reboredo J, Concha López Á, Alcácer García J. Liposarcoma desdiferenciado paratesticular simulando un tumor miofibroblástico inflamatorio. Estudio histológico, inmunohistoquímico y molecular [Histological, immunohistochemical and molecular study of a paratesticular dedifferentiated liposarcoma with inflammatory myofibroblastic tumor-like features]. *Rev Esp Patol.* 2022 Jul-Sep;55(3):212-217. Spanish.
9. Bhambhvani HP, Greenberg DR, Kasman AM, Eisenberg ML. Clinicopathologic features,

- outcomes, and prognostic factors of testicular sarcoma: a population-based study. *Int Urol Nephrol.* 2021 Feb;53(2):257-267.
10. 2020=Salas-Parra RD, Tavares LL, Gupta R, Silletti J, Shah A. Dedifferentiated liposarcoma of the scrotum. Case report and literature review. *J Surg Case Rep.* 2020 Sep 17;2020(9):rjaa342.
 11. Maryamchik E, Lyapichev KA, Halliday B, Rosenberg AE. Dedifferentiated Liposarcoma With Rhabdomyosarcomatous Differentiation Producing HCG: A Case Report of a Diagnostic Pitfall. *Int J Surg Pathol.* 2018 Aug;26(5):448-452.
 12. Wang J, Du YP, Li SX, Hu JH, Wang CX. Recurrent paratesticular dedifferentiated liposarcoma after contralateral radical orchietomy. *Asian J Androl.* 2018 Sep-Oct;20(5):520-522.
 13. Tajima S, Koda K. Paratesticular dedifferentiated liposarcoma with prominent myxoid stroma: report of a case and review of the literature. *Med Mol Morphol.* 2017 Jun;50(2):112-116.
 14. Rekhi B, Navale P, Jambhekar NA. Critical histopathological analysis of 25 dedifferentiated liposarcomas, including uncommon variants, reviewed at a Tertiary Cancer Referral Center. *Indian J Pathol Microbiol.* 2012 Jul-Sep;55(3):294-302.
 15. Thway K, Robertson D, Thway Y, Fisher C. Dedifferentiated liposarcoma with meningothelial-like whorls, metaplastic bone formation, and CDK4, MDM2, and p16 expression: a morphologic and immunohistochemical study. *Am J Surg Pathol.* 2011 Mar;35(3):356-63.
 16. Chondros K, Heretis I, Papadakis M, Bozionelou V, Mavromanolakis E, Chondros N, Mamoulakis C. Dedifferentiated paratesticular liposarcoma with osseous metaplasia. *Case Rep Urol.* 2015;2015:965876.
 17. Crigger C, Barnard J, Zaslau S, Vos JA. Spermatic cord dedifferentiated liposarcoma presenting as a recurrent inguinal hernia. *Can J Urol.* 2016 Dec;23(6):8581-8584.
 18. Hatanaka K, Yoshioka T, Tasaki T, Tanimoto A. Paratesticular dedifferentiated liposarcoma with leiomyosarcomatous differentiation: a case report with a review of literature. *Diagn Pathol.* 2013 Aug 23;8:142.
 19. Coyle D, Flaherty RA, Kelly BD, Hynes SO, Colesky F, Quinlan MR, Corcoran MO, Rogers E. Recurrent dedifferentiated paratesticular liposarcoma with synchronous renal cell carcinoma and prostate cancer. *Curr Urol.* 2013 Feb;6(4):216-8.
 20. McCormick D, Mentzel T, Beham A, Fletcher CD. Dedifferentiated liposarcoma. Clinicopathologic analysis of 32 cases suggesting a better prognostic subgroup among pleomorphic sarcomas. *Am J Surg Pathol.* 1994 Dec;18(12):1213-23.
 21. Azizi et al. describe a case of a giant paratesticular liposarcoma, underscoring the surgical challenges and the use of laparoscopic approaches for large tumors in sensitive regions.

Case Number: 612

Slide Number: 23-3812

Slide View: http://140.120.114.107/ivp_slide_view.php?id=2421



江家瑋

Jia-Wei Jiang

現職：

霍普獸醫病理專科醫院 病理獸醫師

學歷：

國立中興大學獸醫系

國立臺灣大學獸醫專業學院分子暨比較病理生物學研究所碩士

經歷：

臺灣動藥病理獸醫師

Jiang, Jia-Wei (江家瑋), DVM, MS¹; Tsao, Wen-Tien (曹文恬), DVM, MS¹; Luo, I-Chi (羅怡琪), DVM, MS¹

¹HOPE Veterinary Pathology Diagnostic Center (霍普獸醫病理診斷中心)

CASE HISTORY:

Signalment: A 14-year-old, intact male, Dog (fox terrier)

An unidentified cause led to the rupture of the right kidney, resulting in significant hemorrhage within the abdominal cavity. Surgical intervention was required to remove the affected kidney to stabilize the patient and prevent further complications. During the surgery, metastatic lesions were found throughout the peritoneal omentum, with the kidney being the primary site of bleeding. A right kidney removal surgery was conducted on September 22, 2023. The excised kidney was subsequently sent for histopathological examination to determine the underlying pathology.

Gross findings:

The received specimen was unilateral kidney included two trimmed kidney sections and a sample of adipose tissue. On cross-section, portions of the kidney displayed a fragmented appearance, while the adipose tissue was homogeneous with a localized dark red area.

CASE RESULT:

Histopathological findings:

Microscopically, the fragmented appearance areas in gross examination are composed of spindle-shaped tumor cells. At medium to high magnification, the tumor cells form numerous vascular spaces of varying sizes, each filled with differing amounts of erythrocytes. The tumor cells have round to oval nuclei with coarse chromatin and single to multiple nucleoli. Anisocytosis and anisokaryosis are marked, with some multinucleated cells observed. The mitotic figures are about 1-2 per high power fields. The surrounding adipose tissue shows hemorrhage without tumor cell infiltration. Scattered neutrophils and lymphocytes are also present among the erythrocyte clusters.

Immunohistochemical stain:

Immunohistochemically, the tumor cells exhibit strong CD31 positivity and are negative for cytokeratin (CK) staining.

Pathological diagnosis:

Hemangiosarcoma, right kidney mass

Differential diagnosis:

1. Primary hemangiosarcoma
2. Metastatic hemangiosarcoma
3. Renal cell carcinoma (RCC) with angiogenesis

Discussion:

In dogs, primary renal tumors are relatively rare and account for only 0.6–1.7% of all reported neoplasms. In canine primary renal neoplasms, 85% of the cases are of epithelial origin, including renal cell carcinoma (RCC), transitional cell carcinoma (TCC), adenoma, and papilloma; 11% of the cases are of lymphoma and mesenchymal origin, including, hemangioma, leiomyoma, fibroma, lipoma, and malignant counterparts; 4% of the cases are mixed (nephroblastic) tumors¹⁰. The kidneys are quite common sites for development of metastases, however primary renal tumors are relatively uncommon in both the dog and cat. Metastatic neoplasms are two times as common as primary ones in dogs. Hemangiosarcoma (HSA) is a highly malignant tumor derived from vascular endothelial cells and is well known to occur in the spleen, heart, skin and subcutaneous tissues in dogs. The incidence of primary renal HSA is low, with reporting 1% of all canine HSAs². Renal HSA is also a rare disease in humans (called angiosarcoma in human medicine)⁹. Primary renal angiosarcoma (PRA) is characterized by an overall poor prognosis, is of unknown etiology and occurs most commonly in males between 60 and 70 years old⁶. This disease is considered a rare nosologic entity, with an extremely low incidence, resulting in limited clinical understanding. Until 2015, only 62 cases have been reported in the literature⁷.

In one study involving 14 dogs diagnosed with renal HSA, the clinical signs were nonspecific, and the median duration of clinical signs before diagnosis was 60 days. Two dogs presented in cardiovascular collapse secondary to hemoperitoneum. Common hematologic and biochemical abnormalities were anemia (9/14), hematuria (7/14), and proteinuria (7/14). One dog had pulmonary metastasis at diagnosis. All dogs had evidence of a renal mass visualized by abdominal radiography (14/14), ultrasound (9/14), or both. The study also indicated that HSA of the spleen or right atrium was more likely to rupture at detection, while renal HSA rarely ruptures or metastasizes at the time of surgery (21%)⁵. In humans, common clinical symptoms include lower back pain, hematuria, and abdominal mass; however, these symptoms are non-specific and can easily be confused with other renal tumors. Imaging also makes it difficult to differentiate from other kidney tumors, resembling clear cell renal cell carcinoma and other renal malignancies. A definitive diagnosis often requires pathological examination following surgical resection⁷.

HSA can be diagnosed through histopathologic examination but poorly differentiated vascular neoplasm may be indistinguishable from other poorly differentiated sarcoma. The immunohistochemical detection of vWF and CD31 is regarded as an excellent tool for the identification of endothelial cells and vascular origin tumors. However overall immunoreactivity of CD31 is more sensitive than vWF³. In our case, the cytokeratin negative ruled out RCC. The CD31 positive indicate a vascular origin tumor. Distinguishing between primary and secondary HSA can be challenging. One retrospective study demonstrated that distant metastasis at diagnosis appear to

occur less frequently in dogs with renal HSA compared with other visceral forms of HAS⁵. In current case, the usual primary sites for canine HSA (spleen, liver, and right atrium) were not involved and there is no evidence of pulmonary metastasis. Thus, primary renal hemangiosarcoma is suspected, making it less likely to be a metastatic form.

Contrast-enhanced computed tomography (CECT) is essential in differentiating RCC, HSA, and lymphoma in canine renal tumors, especially through contrast enhancement patterns and tumor morphology, which help distinguish tumor types and provide a basis for clinical decision-making. 1. Tumor location and laterality: RCC and HSA are often unilateral tumors, while lymphoma usually affects both kidneys. 2. Contrast enhancement pattern: RCC and HSA generally show heterogeneous enhancement, with HSA exhibiting multiple necrotic or hemorrhagic areas, while lymphoma shows more homogeneous enhancement. 3. Associated features: RCC may be accompanied by thrombus formation, HSA exhibits aggressive spread, and lymphoma primarily spreads through lymph nodes and infiltration of surrounding adipose tissue¹⁰.

Nephrectomy is considered effective for local control of renal HSA in dogs. A study from 2006 reported that all dogs underwent nephrectomy, and 4/14 dogs also received adjunctive chemotherapy. Median survival time of all dogs was 278 days (range 0–1005 days). Although dogs treated with chemotherapy experienced a lower MST, this is likely related to selection bias, as dogs treated with chemotherapy are often those with advanced disease⁵. Another study suggested that chemotherapy with carboplatin may have contributed to the prolongation of remission duration, but the true effect is unclear². Moreover, dogs with hemoperitoneum had significantly shorter survival times than dogs without hemoperitoneum (62 days versus 286 days, P<0.001)⁵. In human, surgery provides histopathology and might be the best treatment for localized lesions. Voluminous tumors may benefit from postoperative radiation therapy, whereas recurrent and metastatic cases are treated with systemic therapy. More recently, targeted therapies such as pazopanib, an oral angiogenesis inhibitor, have been successfully used with a 20% response rate in the treatment of angiosarcomas. The roles of tyrosine kinase inhibitors and immunotherapies in primary renal angiosarcoma must be clarified⁸. In prognosis, primary metastatic status and tumor size exceeding 5 cm are strong prognostic factors of cancer-specific survival in multivariate analysis [HR for disease-specific survival 2.03 (1.15–3.58, P = 0.015) and 6.25 (1.92–20.36, P = 0.002), respectively]^{4,8}.

In particular, the development of one type of neoplasia in humans can increase the risk of additional neoplastic events. In one study, 9% of dogs were diagnosed with neoplasia in other body systems before, concurrently, or after renal neoplasia. One notable case involved a dog with five other neoplasms before developing renal hemangiosarcoma, suggesting a possible tumor suppressor gene mutation causing multiple neoplasia. Similarly, a human study on urologic malignancies found secondary cancers in renal tumor patients, including colon, thyroid, uterine, and breast cancers. Gene mutations like UROC28 and p53 have been linked to various cancers in both humans and dogs, suggesting a Li-Fraumeni-like syndrome¹.

In conclusion, it was considered that detailed examination and early excision assuming HSA were necessary for renal tumor. Cytology may be useful as an adjunctive diagnosis, but the risk of

dissemination should be considered. It may be important to perform adjuvant therapy assuming metastasis and to follow up carefully². In our case, the dog abdominal hemorrhage occurred again and was euthanized one month post-surgery.

References:

1. Bryan, J. N., Henry, C. J., Turnquist, S. E., Tyler, J. W., Liptak, J. M., Rizzo, S. A., Sfiligoi, G., Steinberg, S. J., Smith, A. N., & Jackson, T. (2006). Primary renal neoplasia of dogs. *Journal of Veterinary Internal Medicine*, 20, 1155–1160.
2. Itoh, T., Mizunaga, Y., Nishi, A., Fujimoto, S., Ikeda, A., Uchida, K., & Shii, H. (2015). Primary renal hemangiosarcomas in two dogs. *Japanese Journal of Veterinary Anesthesia and Surgery*, 46(1), 19–24.
3. Jung, S.K., Yang, H.S., & Kim, J.H. (2013). Immunohistochemical diagnosis of primary renal hemangiosarcoma in a dog. *Journal of Veterinary Clinics*, 30(4), 296–300.
4. Kamitani, R., Matsumoto, K., Takeda, T., Mizuno, R., & Oya, M. (2022). Evaluation of prognostic factors and treatment options for renal angiosarcoma: A retrospective analysis of 113 reported cases. *European Journal of Surgical Oncology*, 49(1), 263–270.
5. Locke, J. E., & Barber, L. G. (2006). Comparative aspects and clinical outcomes of canine renal hemangiosarcoma. *Journal of Veterinary Internal Medicine*, 20, 962–967.
6. Mastoraki, A., Schizas, D., Giannakas, T., Papadopoulos, P. P., Naar, L., Vergadis, C., Anastasios, I., Vassiliu, P., Pikoulis, E., & Liakakos, T. (2020). Primary angiosarcoma of the kidney: Literature review of a rare nosologic entity. *Anticancer Research*, 40, 625–633.
7. Omiyale, A. O. (2015). Clinicopathological features of primary angiosarcoma of the kidney: A review of 62 cases. *Translational Andrology and Urology*, 4(4), 464–473.
8. Peyrottes, A., Bodard, S., Timsit, M.-O., Méjean, A., Panthier, F., & Audenet, F. (2024). Primary angiosarcoma of the kidney: A challenging diagnosis. *The French Journal of Urology*, 34, 102609.
9. Souza, O. E., Etchebehere, R. M., Lima, M. A., & Monti, P. R. (2006). Primary renal angiosarcoma. *International Brazilian Journal of Urology*, 32(4), 448-450.
10. Tanaka, T., Akiyoshi, H., Nishida, H., Mie, K., Lin, L.-S., Iimori, Y., & Okamoto, M. (2019). Contrast-enhanced computed tomography findings of canine primary renal tumors including renal cell carcinoma, lymphoma, and hemangiosarcoma. *PLoS ONE*, 14(11), e0225211.

Case Number: 613

Slide Number: 24 25359A

Slide View: http://140.120.114.107/ivp_slide_view.php?id=2418



彭奕仁

Yi-Jen Peng

現職：

三軍總醫院病理部外科病理主治醫師

學歷：

國防大學國防醫學院醫學科學研究所博士

經歷：

三軍總醫院病理部主任

國防大學國防醫學院副教授

論文選錄:

1. Lin HH, Peng YJ, Chang CF, Chang PY, Peng PC, Chang WC, Chen TW, Hsieh TY. Heterogenous liver parenchymal enhancement in CT is a favorable prognosis of HCC after hepatic resection. *Am J Cancer Res.* 2024 Jun 15;14(6):2984-2993.
2. Wang YH, Peng YJ, Liu FC, Lin GJ, Huang SH, Sytwu HK, Cheng CP. Interleukin 26 Induces Macrophage IL-9 Expression in Rheumatoid Arthritis. *Int J Mol Sci.* 2023 Apr 19;24(8):7526.
3. Peng YJ, Chen CM, Li YF, Guo YT, Chen YT, Chao KH, Yang JJ. Patent blue versus methylene blue and indigo carmine as a better dye for chromodiscography: in vitro staining efficacy and cytotoxicity study using bovine coccygeal intervertebral discs. *Spine J.* 2023 Feb 18:S1529-9430(23)00076-1.
4. Tzeng YS, Peng YJ, Tang SE, Huang KL, Chu SJ, Wu SY, Cheng CP. Intermittent Exposure of Hypercapnia Suppresses Allograft Rejection via Induction of Treg Differentiation and Inhibition of Neutrophil Accumulation. *Biomedicines.* 2022 Apr 1;10(4):836.
5. Ioannou GN, Lee SP, Linsley PS, Gersuk V, Yeh MM, Chen YY, Peng YJ, Dutta M, Mascarinas G, Molla B, Cui JY, Savard C. Pcsk9 Deletion Promotes Murine Nonalcoholic Steatohepatitis and Hepatic Carcinogenesis: Role of Cholesterol. *Hepatol Commun.* 2022 Apr;6(4):780-794.
6. Lu HT, Lu JW, Lee CH, Peng YJ, Lee HS, Chu YH, Ho YJ, Liu FC, Shen PH, Wang CC. Attenuative Effects of Platelet-Rich Plasma on 30 kDa Fibronectin Fragment-Induced MMP-13 Expression Associated with TLR2 Signaling in Osteoarthritic Chondrocytes and Synovial Fibroblasts. *J Clin Med.* 2021 Sep 29;10(19):4496.

Peng, Yi-Jen (彭奕仁), M.D., Ph.D.

Department of Pathology, Tri-Service General Hospital, National Defense Medical Center, Taipei,
Taiwan (國防醫學院三軍總醫院病理部)

CASE HISTORY:

Signalment: A 56-year-old female, indigenous Taiwanese

Chief complaint:

The patient suffered from urinary frequency and right flank pain for 2 days and came to our outpatient department for help.

Clinical history and course:

The patient has been well. Physical examination showed no knocking tenderness in the CV angles. Bladder tumor or ureterocele, right was suspected at first according to abdominal sonography. The patient also had uterine myomas, thus compression syndromes causing urinary frequency was suspected too. Further evaluations of cystoscopy showed no tumor or stone in the urinary bladder and no bloody efflux from bilateral ureteral orifice. However, Abdominal and pelvic CT with contrast showed an exophytic nodule (size: about 1.1 cm) in right kidney lower pole. The nodule shows contrast enhancement on arterial phase image and washout on delayed phase image. A renal cell carcinoma is suspected. Thus, after discussion with the patient, admitted for robotic-assisted partial nephrectomy was performed.

Lab data on admission:

Serum data: BUN 15 mg/dL; Creatine 0.6 mg/dL; Na 138 mmol/L; K 3.9 mmol/L; AST 14 U/L; ALT 13 U/L; Blood routine data: WBC 8550/ul; Hb 14.2 g/dL; PLT 237000/ul; neutrophil 64.5%; lymphocyte 26.2%.

Gross findings:

The patient underwent robotic-assisted partial nephrectomy and a well-defined exophytic nodular lesion with intact renal capsule was noted.

CASE RESULT:

Histopathological findings:

The nodular lesion is characterized by thinly branching papillae and low-grade oncocytic tumor cells with nuclei aligned towards the apex of the cell. Tumor cells are immunoreactive for GATA3 and PAX8, but negative for vimentin.

Pathological diagnosis:

Papillary renal neoplasm with reverse polarity.

Differential diagnosis:

1. Renal papillary adenoma.
2. Oncocytoma of the kidney.
3. Papillary renal cell carcinoma, classic type.

Discussion:

Papillary renal neoplasm with reverse polarity (PRNRP) is a recently described renal tumor entity characterized by distinct histomorphological and molecular features. PRNRP is typically a small, well-circumscribed neoplasm with a papillary architecture. The tumor cells exhibit eosinophilic, finely granular cytoplasm and apical nuclear polarity, which is the reverse of the usual basal nuclear polarity seen in most renal cell carcinomas. Immunohistochemically, PRNRP is often positive for GATA3 and PAX8, while being negative for vimentin^{2,4}. A hallmark of PRNRP is the frequent occurrence of KRAS mutations, particularly at codon 12². These mutations are believed to drive the development and progression of PRNRP³. Other molecular alterations, such as chromosomal abnormalities, are less common in PRNRP compared to other types of renal cell carcinoma⁵. PRNRP can be differentiated from other renal tumors, particularly papillary renal cell carcinoma (PRCC), based on its unique histomorphological and immunohistochemical features. While PRCC often exhibits nuclear grade and chromosomal alterations, PRNRP typically lacks these features⁸.

PRNRP is generally an indolent tumor with a favorable prognosis⁷. Most cases are detected incidentally and do not require aggressive treatment. However, it is crucial to accurately diagnose PRNRP to avoid unnecessary intervention and to provide appropriate patient counseling.

Conclusion:

PRNRP is a distinct renal tumor entity with a favorable prognosis. Its recognition is important for accurate diagnosis and appropriate clinical management. Further research is needed to better understand the molecular mechanisms underlying PRNRP and to identify potential therapeutic targets⁶.

References:

1. Al-Obaidy, K. I., J. N. Eble, L. Cheng, S. R. Williamson, W. A. Sakr, N. Gupta, M. T. Idrees and D. J. Grignon (2019). "Papillary Renal Neoplasm With Reverse Polarity: A Morphologic, Immunohistochemical, and Molecular Study." Am J Surg Pathol 43(8): 1099-1111.
2. Al-Obaidy, K. I., J. N. Eble, M. Nassiri, L. Cheng, M. K. Eldomery, S. R. Williamson, W. A. Sakr, N. Gupta, O. Hassan, M. T. Idrees and D. J. Grignon (2020). "Recurrent KRAS mutations in papillary renal neoplasm with reverse polarity." Mod Pathol 33(6): 1157-1164.

3. Al-Obaidy, K. I., R. M. Saleeb, K. Trpkov, S. R. Williamson, A. R. Sangui, M. Nassiri, O. Hes, R. Montironi, A. Cimadamore, A. M. Acosta, Z. I. Alruwaii, A. Alkashash, O. Hassan, N. Gupta, A. O. Osunkoya, J. D. Sen, L. A. Baldrige, W. A. Sakr, M. T. Idrees, J. N. Eble, D. J. Grignon and L. Cheng (2022). "Recurrent KRAS mutations are early events in the development of papillary renal neoplasm with reverse polarity." *Mod Pathol* 35(9): 1279-1286.
4. Kiyoza, D., K. Kohashi, D. Takamatsu, T. Yamamoto, M. Eto, T. Iwasaki, J. Motoshita, T. Shimokama, M. Kinjo, Y. Oshiro, H. Yonemasu and Y. Oda (2021). "Morphological, immunohistochemical, and genomic analyses of papillary renal neoplasm with reverse polarity." *Hum Pathol* 112: 48-58.
5. Lobo, J., R. Ohashi, M. B. Amin, D. M. Berney, E. M. Comperat, I. A. Cree, A. J. Gill, A. Hartmann, S. Menon, G. J. Netto, M. R. Raspollini, M. A. Rubin, P. H. Tan, S. K. Tickoo, T. Tsuzuki, S. Turajlic, M. Zhou, J. R. Srigley and H. Moch (2022). "WHO 2022 landscape of papillary and chromophobe renal cell carcinoma." *Histopathology* 81(4): 426-438.
6. Park, J. H., S. J. Shin, H. J. Kim, S. Oh and Y. M. Cho (2024). "Histopathologic classification and immunohistochemical features of papillary renal neoplasm with potential therapeutic targets." *J Pathol Transl Med* 58(6): 321-330.
7. Sung, J. W., Y. I. Lee, Y. Kim, C. Song, J. M. Park, S. Y. Yoon, B. Ahn and Y. M. Cho (2024). "Papillary renal cell carcinoma revisited: impact of the World Health Organization 2022 classification on prognostication." *BJU Int*.
8. Yang, T., E. Kang, L. Zhang, J. Zhuang, Y. Li, Y. Jiang, H. Wang, W. Yu and W. Zhang (2022). "Papillary renal neoplasm with reverse polarity may be a novel renal cell tumor entity with low malignant potential." *Diagn Pathol* 17(1): 66.

Case Number: 614

Slide Number: NTU2024-1297

Slide View: http://140.120.114.107/ivp_slide_view.php?id=2419



羅妤意

Yu-Yi Lo

現職：

國立台灣大學獸醫專業學院分子暨比較病理生物學研究所 碩士生

學歷：

國立台灣大學獸醫系學士

經歷：

113 年獸醫師考合格

Lo, Yu-Yi (羅妤意), DVM¹; Chong, Yat (張暉), DVM, MS¹; Shih, Cheng-Hsin (施正心), DVM, MS¹

¹Graduate Institute of Molecular and Comparative Pathobiology, School of Veterinary Medicine, National Taiwan University (國立台灣大學獸醫專業學院分子暨比較病理生物學研究所)

CASE HISTORY

Signalment: One-year-old intact male feline

Clinical history:

Abdominal enlargement was noted for at least 2 months. Ultrasonography revealed a hyperechogenic mass originated from or highly adhesive with the left kidney. Laparotomy with mass removal was performed one day after, and the mass was considered as the abnormal left kidney.

Gross findings:

The received extremely enlarged left kidney was 9.0 x 9.5 x 8.0 cm. Under serial sectioning, there was a multilobulated, meaty, white to tan mass occupying approximately 80% of the kidney, and the remained renal structure was compressed to the periphery.

CASE RESULT

Histopathologic findings:

Effacing in the renal cortex and medulla and compressing the adjacent renal parenchyma is an encapsulated and lobulated, densely cellular neoplastic growth mainly composed of a triphasic mixture of epithelium, blastema and myxomatous mesenchymal tissues. The epithelial population is composed of cuboidal to columnar cells arranged in irregular tubules that have lumens of various sizes, supported by a variable amount of fibrovascular stroma; some form small acini or tubules and some tufts of epithelium invaginate into a lumen to form glomeruloid structures (embryonic glomeruli). These neoplastic cells have indistinctly bordered and scant to moderate amount of cytoplasm, round to oval nucleus with stippled chromatin and inconspicuous nucleoli. Marked anisokaryosis is noted and the mitotic count is 37 per 10 HPFs (2.37mm²). The blastema cells are proliferated and arranged in nests and tubules. These cells have distinctly bordered, scant lightly basophilic cytoplasm and round to oval, vesicular nucleus with single distinct nucleolus. The anisokaryosis and anisocytosis are mild. The mitotic figure is absent. Separating the epithelial and blastema cells are loose mesenchymal cells embedded in myxomatous extracellular matrix. These mesenchymal cells have indistinctly bordered eosinophilic fibrillary cytoplasm, elongated to oval nuclei with finely stippled chromatin and inconspicuous nucleolus. Central coagulative necrosis and

hemorrhage are noted within the neoplasm. Multifocally infiltrating the renal interstitial region is numerous lymphocytes and plasma cells.

Pathological diagnosis:

Nephroblastoma, with lymphoplasmacytic interstitial nephritis, left kidney

Differential diagnosis:

1. Nephroblastoma
2. Nephrogenic rests (nephroblastomatosis)
3. Mesoblastic nephroma
4. Metanephric adenoma
5. Renal cell carcinoma

Final diagnosis:

Nephroblastoma, with lymphoplasmacytic interstitial nephritis, left kidney

Discussion:

In the present case, gross examination revealed a single large, spherical mass in the left kidney with a white to tan cross section. Histopathological examination showed an encapsulated neoplasm characterized by embryonic glomeruli and a triphasic cellular differentiation composed of epithelium, blastema and myxomatous mesenchymal tissues. Based on these findings, a diagnosis of nephroblastoma was made. The major differential diagnoses include nephrogenic rests (nephroblastomatosis), metanephric adenoma, mesoblastic nephroma, and renal cell carcinoma. Mesoblastic nephromas have the same origin as nephroblastomas, but they lack primitive glomeruli and nephronic tubules, and thus they can be differentiated from the present case. Metanephric adenomas are non-encapsulated, and are characterized by tightly packed tubules, long branching and angulated ducts, and abortive glomeruli. Stroma is often scant, and calcification may be prominent. Nephrogenic rests (nephroblastomatosis) are non-encapsulated and often present as multifocal lesions. They are considered preneoplastic lesions characterized by less differentiated cell components similar to nephroblastomas.

Immunohistochemistry (IHC) staining for nephroblastomas includes vimentin, CK and Wilm's tumor gene product (WT-1). All three cell components are positive for vimentin. Tubules and glomeruli differentiation are positive for CK, and stromal cells are positive for desmin, indicating myofibroblastic differentiation. They are all negative for neuronal-specific cell markers. WT-1 IHC staining can be applied to distinguish nephroblastoma (WT-1 positive) from mesoblastic nephroma and renal cell carcinoma (WT-1 negative), but not the metanephric adenoma and nephrogenic rests.

The tissue of origin of nephroblastomas is metanephric blastema, which are embryonic cells and would later develop in permanent kidney. In cats, nephroblastoma is the second most common and account for approximately 18% of the primary renal neoplasms. The metastasis rate is expected in approximately >50% of cases upon necropsy. During the embryonic development, metanephric

blastema may trap between the dura mater and the spinal cord from T10 to L3 segments and cause ectopic nephroblastoma in canine thoracolumbar spinal cord. Finally, although the histological criteria for estimating the biological behavior is not well established, yet high mitotic activity, invasion, anaplasia, and sarcomatous differentiation might indicate a malignant behavior and may lead to poorer prognoses.

References

1. Al-Hussain, T., Ali, A., & Akhtar, M. (2014). Wilms tumor: an update. *Advances in anatomic pathology*, 21(3), 166-173.
2. Jubb, K. V. F., Kennedy, P. C., & Palmer, N. (2012). *Pathology of domestic animals*. Academic press.
3. Meuten, D. J. (Ed.). (2020). *Tumors in domestic animals*. John Wiley & Sons.
4. Popov, S. D., Sebire, N. J., & Vujanic, G. M. (2016). Wilms' Tumour – Histology and Differential Diagnosis. In M. M. van den Heuvel-Eibrink (Ed.), *Wilms Tumor*. Codon Publications.
5. Sadler, T. W. (2018). *Langman's medical embryology*. Lippincott Williams & Wilkins.
6. Soldati, S., Radaelli, E., Mazzuti, A., & Scanziani, E. (2012). Congenital mesoblastic nephroma in a young basset hound dog. *Journal of Small Animal Practice*, 53(12), 709-713.

中華民國比較病理學會章程

第一章 總則

- 第一條 本會定名為中華民國比較病理學會，英文名稱為 Chinese Society of Comparative Pathology (CSCP) (以下簡稱本會)。
- 第二條 本會依內政部人民團體法設立，為非營利目的之社會團體，以結合人類醫學與動物醫學資源，提倡比較病理學之研究與發展，交換研究教學心得，聯絡會員友誼及促進國際間比較醫學之交流為宗旨。
- 第三條 本會以全國行政區域為組織區域，會址設於主管機關所在地區，並得報經主管機關核准設主分支機構。前項分支機構組織簡則由理事會擬訂，報請主管機關核准後行之。會址及分支機構之地址於設置及變更時應報請主管機關核備。
- 第四條 本會之任務如左：
- 一、 提倡比較病理學之研究與發展。
 - 二、 舉辦學術演講會、研討會及相關訓練課程。
 - 三、 建立國內比較醫學相關資料庫。
 - 四、 發行比較病理學相關刊物。
 - 五、 促進國內、外比較醫學之交流。
 - 六、 其他有關比較病理學術發展之事項。
- 第五條 本會之主管機關為內政部。目的事業主管機關依章程所訂之宗旨與任務，主要為行政院衛生署及農業委員會，其目的事業應受各該事業主管機關之指導與監督。

第二章 會員

- 第六條 本會會員申請資格如下：
- 一、 一般會員：贊同本會宗旨，年滿二十歲，具有國內外大專院校(或同等學歷)生命科學及其它相關科系畢業資格或高職畢業從事生命科學相關工作滿兩年者。
 - 二、 學生會員：贊同本會宗旨，在國內、外大專院校生命科學或其它相關科系肄業者(檢附學生身份證明)。
 - 三、 贊助會員：贊助本會工作之團體或個人。

四、榮譽會員：凡對比較病理學術或會務之推展有特殊貢獻，經理事會提名並經會員大會通過者。

前項一、二、三項會員申請時應填具入會申請書，經一般會員二人之推薦，經理事會通過，並繳納會費。學生會員身份改變成一般會員時，得再補繳一般會員入會費之差額後，即成為一般會員，榮譽會員免繳入會費與常年會費。

第七條 一般會員有表決權、選舉權、被選舉與罷免權，每一會員為一權。贊助會員、學生會員與榮譽會員無前項權利。

第八條 會員有遵守本會章程、決議及繳納會費之義務。

第九條 會員有違反法令、章程或不遵守會員大會決議時，得經理事會決議，予以警告或停權處分，其危害團體情節重大者，得經會員大會決議予以除名。

第十條 會員喪失會員資格或經會員大會決議除名者，即為出會。

第十一條 會員得以書面敘明理由向本會聲明退會。但入會費與當年所應繳納的常年會費不得申請退費。

第三章 組織及職員

第十二條 本會以會員大會為最高權力機構。

第十三條 會員大會之職權如下：

- 一、訂定與變更章程。
- 二、選舉及罷免理事、監事。
- 三、議決入會費、常年會費、事業費及會員捐款之方式。
- 四、議決年度工作計畫、報告、預算及決算。
- 五、議決會員之除名處置。
- 六、議決財產之處分。
- 七、議決本會之解散。
- 八、議決與會員權利義務有關之其他重大事項。

前項第八款重大事項之範圍由理事會訂定之。

第十四條 本會置理事十五人，監事五人，由會員選舉之，分別成立理事會、監事會。

選舉前項理事、監事時，依計票情形得同時選出候補理事五人，候補監事一人，遇理事或監事出缺時，分別依序遞補之。

本屆理事會得提出下屆理事及監事候選人參考名單。

第十五條 理事會之職權如下：

- 一、審定會員之資格。
- 二、選舉及罷免常務理事及理事長。

- 三、 議決理事、常務理事及理事長之辭職。
- 四、 聘免工作人員。
- 五、 擬訂年度工作計畫、報告、預算及決算。
- 六、 其他應執行事項。

第十六條 理監事置常務理事五人，由理事互選之，並由理事就常務理事中選舉一人為理事長。

理事長對內綜理監督會議，對外代表本會，並擔任會員大會、理事會主席。

理事長因事不能執行職務時，應指定常務理事一人代理之，未指定或不能指定時，由常務理事互推一人代理之。
理事長或常務理事出缺時，應於一個月內補選之。

第十七條 監事會之職權如左：

- 一、監察理事會工作之執行。
- 二、審核年度決算。
- 三、選舉及罷免常務監事。
- 四、議決監事及常務監事之辭職。
- 五、其他應監察事項。

第十八條 監事會置常務監事一人，由監事互選之，監察日常會務，並擔任監事會主席。

常務監事因事不能執行職務時，應指定監事一人代理之，未指定或不能指定時，由監事互推一人代理之。監事會主席（常務監事）出缺時，應於一個月內補選之。

第十九條 理事、監事均為無給職，任期三年，連選得連任。理事長之連任以一次為限。

第二十條 理事、監事有下列情事之一者，應即解任：

- 一、喪失會員資格。
- 二、因故辭職經理事會或監事會決議通過者。
- 三、被罷免或撤免者。
- 四、受停權處分期間逾任期二分之一者。

第二十一條 本會置祕書長一人，承理事長之命處理本會事務，令置其他工作人員若干人，由理事長提名經理事會通過後聘免之，並報主管機關備查。但祕書長之解聘應先報主管機關核備。

前項工作人員不得由選任之職員（理監事）擔任。
工作人員權責及分層負責事項由理事會另定之。

第二十二條 本會得設各種委員會、小組或其它內部作業組織，其組織簡則由理事會擬定，報經主機關核備後施行，變更時亦同。

第二十三條 本會得由理事會聘請無給顧問若干人，其聘期與理事、監事之任期同。

第四章 會議

第二十四條 會員大會分定期會議與臨時會議兩種，由理事長召集，召集時除緊急事故之臨時會議外應於十五日前以書面通知之。定期會議每年召開一次，臨時會議於理事會過半數認為必要，或經會員五分之一以上之請，或監事會半數函請召集時召開之。

第二十五條 會員不能親自出席會員大會時，得以書面委託其他會員代理，每一會員以代理一人為限。

第二十六條 會員大會之決議，以出席人數過半之同意行之。但章程之訂定與變更、會員之除名、理事及監事之罷免、財產之處置、本會之解散及其他與會權利義務有關之重大事項應有出席人數三分之二以上同意。但本會如果辦理法人登後，章程之變更應以出席人數四分之三以上之同或全體會員三分之二以上書面之同意行之。

第二十七條 理事會及監事會至少每六個月各舉行會議一次，必要時得召開聯席會議或臨時會議。

前項會議召集時除臨時會議外。應於七日以以書面通知，會議之決議各以理事、監事過半數之出席，出席人較多數之同意行之。

第二十八條 理事應出席理事會議，監事應出席監事會議，不得委託出席；理事、監事連續二次無故缺席理事會、監事會者，視同辭職。

第五章 經費及會計

第二十九條 本會經費來源如下：

- 一、入會費：一般會員新台幣壹仟元，學生會員壹佰元，贊助會員伍仟元，於入會時繳納。
- 二、常年會費：一般會員新台幣壹仟元，學生會員壹佰元。
- 三、事業費。
- 四、會員捐款。
- 五、委託收益。

六、基金及其孳息。

七、其他收入。

第三十條 本會會計年度以國曆年為準，自每年一月一日起至十二月三十一日止。

第三十一條 本會每年於會計年度開始前二個月由理事會編造年度工作計劃、收支預算表、員工待遇表，提會員大會通過（會員大會因故未能如期召開者，先提理監事聯席會議通過），於會計年度開始前報主管機關核備，並於會計年度終了後二個月內由理事會編造年度工作報告、收支決算表、現金出納表、資產負債表、財產目錄及基金收支表，送監事會審核後，造具審核意見書送還理事會，提會員大會通過，於三月底前報主管機關核備（會員大會未能如期召開者，需先報主管機關備查）。

第三十二條 本會解散後，剩餘財產歸屬所在地之地方自治團體或主管機關指定之機關團體所有。

第三十三條 本章程未規定事項，悉依有關法令規定辦理。

第三十四條 本章程經大會通過，報經主管機關核備後施行，變更時亦同。

第三十五條 本章程經本會民國八十五年二月四日第一屆第一次會員大會通過，並報經內政部 85 年 3 月 14 日台(85)內社字第 8507009 號函准予備查。

中華民國比較病理學會 第十屆理監事簡歷冊

序號	職別	姓名	性別	學歷	經歷	現任本職
1	理事長	張俊梁	男	國防醫學院醫學科學研究所博士	國防醫學院兼任助理教授	國軍桃園總醫院病理檢驗部兼任主治醫師/台北榮民總醫院桃園分院兼任主治醫師/銘傳大學、國防醫學院兼任教授
2	常務理事	邱慧英	女	國立台大獸醫專業學院博士	台灣養豬科學研究所	國立中興大學獸醫病理生物學研究所副教授
3	常務理事	張惠雯	女	國立臺灣大學獸醫專業學院博士	美國哈佛醫學院博士後	台灣大學分子暨比較病理生物學研究所副教授
4	常務理事	陳燕麟	男	輔仁大學化學研究所博士	日本國立神經精神中心研究員	三軍總醫院病理部主治醫師/國防醫學院助理教授
5	常務理事	劉振軒	男	美國加州大學戴維斯校區比較病理學博士	國立臺灣大學獸醫專業學院院長	台灣大學分子暨比較病理生物學研究所兼任教授
6	理事	江家瑋	男	國立臺灣大學獸醫專業學院碩士		霍普獸醫病理專科醫院病理獸醫師
7	理事	林永和	男	國立台大病理研究所碩士	台北醫學院病理科講師	台北醫學院病理科副教授
8	理事	張皓凱	男	國立中興大學獸醫病理學研究所碩士		立眾病理實驗室主任 病理獸醫
9	理事	彭奕仁	男	國防醫學院醫學科學研究所博士	美國西雅圖華盛頓大學病理研究員	三軍總醫院病理部主任/國防醫學院病理及寄生蟲研究所所長/副教授
10	理事	黃威翔	男	國立臺灣大學獸醫專業學院博士		台灣大學分子暨比較病理生物學研究所副教授
11	理事	賈敏原	男	國立臺灣大學獸醫專業學院博士	國衛院研究員	國立中興大學獸醫系副教授
12	理事	鄭明芳	男	國立陽明大學口腔生物研究所博士	三軍總醫院病理部主治醫師	國軍花蓮總醫院組織臨床病理科主任
13	理事	賴銘淙	男	清華大學生命科學院博士	彰濱秀傳紀念醫院病理科主任	衛生福利部臺中醫院 病理學科主任/中山醫學大學病理科副教授
14	理事	簡耀君	男	國立臺灣大學獸	長青動物醫院病	長青動物醫院病理部

				醫專業學院碩士	理部主任	主任
15	常務監事	陳姿妤	女	國立中興大學獸醫病理學研究所碩士	生技中心研究員	財團法人國家實驗研究院國家實驗動物中心副技術師
16	監事	朱旆億	男	國立臺灣大學醫學系/國立臺灣大學獸醫專業學院博士	輔仁大學醫學系兼任助理教授	彰化秀傳紀念醫院病理科主任
17	監事	施洽雯	男	國立國防醫學院病理研究所	中山醫學院病理科副教授	羅東博愛醫院病理科主任
18	監事	廖俊旺	男	國立台灣大學獸醫學研究所博士	農業藥物毒物試驗所應用毒理組副研究員	國立中興大學獸醫病理生物學研究所教授
19	監事	鄭謙仁	男	美國北卡羅萊納州立大學博士	台灣大學獸醫學系教授兼院長	台灣大學分子暨比較病理生物學研究所教授
20	秘書長	張晏禎	女	國立臺灣大學獸醫專業學院博士	中央研究院博士後	台灣大學分子暨比較病理生物學研究所助理教授

中華民國比較病理學會會員名單

排序	會員編號	姓名	類別	備註
1	A00002	劉振軒	常務理事	
2	A00015	廖俊旺	監事	
3	A00022	蔡睦宗	一般會員	
4	A00041	許永祥	一般會員	停權
5	A00061	鄭謙仁	監事	
6	A00069	阮正雄	一般會員	停權
7	A00071	祝志平	一般會員	停權
8	A00074	李進成	一般會員	停權
9	A00076	施洽雯	監事	
10	A00087	林正忠	一般會員	停權
11	A00105	林永和	理事	
12	A00143	賴銘淙	理事	
13	A00262	楊俊宏	一般會員	停權
14	A00268	張俊梁	理事長	
15	A00286	江蓉華	一般會員	停權
16	A00288	蔡慧玲	一般會員	
17	A00294	魯懿萍	一般會員	停權
18	A00296	朱旆億	監事	
19	A00297	蔡懷德	一般會員	停權
20	A00299	林以樂	一般會員	停權
21	A00303	張文發	一般會員	停權
22	A00305	黃心宏	一般會員	
23	A00310	邱慧英	常務理事	
24	A00311	白馨	一般會員	停權
25	A00313	江家瑋	理事	
26	A00314	張惠雯	常務理事	
27	A00315	陳佳其	一般會員	停權
28	A00316	施正心	一般會員	
29	A00317	楊伊平	一般會員	
30	A00319	蔣克新	一般會員	停權
31	A00320	蔡清龍	一般會員	停權

排序	會員編號	姓名	類別	備註
32	A00321	吳佳樺	一般會員	停權
33	A00322	簡耀君	理事	
34	A00323	陳彥伯	一般會員	停權
35	A00324	黃馨頤	一般會員	停權
36	A00325	陳姿妤	常務監事	
37	A00326	賈敏原	理事	
38	A00327	鄭明芳	理事	
39	A00328	彭奕仁	理事	
40	A00329	李育翰	一般會員	停權
41	A00330	陳燕麟	常務理事	
42	A00331	許志勤	一般會員	
43	A00332	于知仁	一般會員	
44	A00333	何佳霖	一般會員	
45	A00334	蔡雨倫	一般會員	停權
46	A00335	林宜信	一般會員	
47	A00336	陳縱宇	一般會員	
48	A00337	郭建均	學生會員	原一般會員
49	A00338	周品君	一般會員	停權
50	A00339	陳威廷	一般會員	停權
51	A00340	高郁茜	一般會員	停權
52	A00341	趙曉梅	一般會員	停權
53	A00342	洪義文	一般會員	停權
54	A00343	羅雅文	一般會員	停權
55	A00344	黃威翔	理事	
56	A00345	郭軒	一般會員	停權
57	A00346	徐治平	一般會員	停權
58	A00347	何永傳	一般會員	
59	A00348	曹文恬	一般會員	
60	A00349	羅怡琪	一般會員	
61	A00350	張晏禎	秘書長	
62	A00351	陳謙豪	一般會員	
63	A00352	邱泓錫	一般會員	
64	A00353	黃泰堂	一般會員	

排序	會員編號	姓名	類別	備註
65	A00354	田永田	一般會員	
66	A00355	杭仁釗	一般會員	
67	A00356	張皓凱	理事	
68	A00357	林東衛	一般會員	
69	A00358	吳保樹	一般會員	
70	A00359	徐治平	一班會員	
71	A00360	張權星	一般會員	
72	A00361	陳以瑛	一般會員	
73	A00362	楊馥華	一般會員	
74	A00363	林秉郁	一般會員	
75	A00364	彭曉婷	一般會員	
76	A00365	向家珍	一般會員	
77	A00366	李勻	一般會員	
78	A00367	廖淑惠	一般會員	
79	A00368	林鈺傑	一般會員	
80	A00369	蔡文銓	一般會員	

中華民國比較病理學會 113 年度工作計劃

一、 會務

(一) 徵求會員

二、 持續進行學會推廣及會員召募，擴大會員陣容，

(一) 整理會籍與清查會費

1. 更新整理會籍資料，並製作會員通訊錄

2. 清查會員繳費狀況，進行催繳，缺繳三年以上徹底實行停權

(二) 召開會議：召開會員大會一次，審查 112 年度工作報告與經費收支狀況，研議 113 年度之工作計劃及預算

(三) 學術活動：持續辦理三次研討會，並邀請國內外專家學者做學術性的演講

三、 業務

(一) 繳納會費

(二) 文書處理

(三) 整理與更新會員信箱，刪除無效信箱

(四) 痘例資料處理：掃描研討會議病例切片，供會員研究教學使用

(五) 研討會活動照片、會員狀態及網頁維護更新

(六) 進行獸醫再教育學分與病理學分申請，協助會員學分認證

中華民國比較病理學會 113 年度工作報告

一、 召開會員大會、理監事會議、舉辦學術研討會

(一) 會員大會

1. 第十屆第一次會員大會於 113 年 4 月 13 日於台大獸醫專業學院召開。

(二) 理監事會議

1. 第十屆第四次理監事會議於 113 年 4 月 13 日於台大獸醫專業學院召開。
2. 第十屆第五次理監事會議於 113 年 8 月 10 日於台大獸醫專業學院召開。
3. 第十屆第六次理監事會議於 113 年 12 月 14 日於台大獸醫專業學院召開。

二、 舉辦學術演講

(一) 第 89 次比較病理研討會邀請專題演講：

1. 顧文輝醫師：分子病理診斷在精準醫學之最新發展趨勢
2. 陳雅媚助理教授：Inflammatory bowel disease in companion animals

(二) 第 90 次比較病理研討會邀請專題演講：

1. 劉越萍司長：我國精準醫療政策-以實驗室開發檢測為例
2. 林水龍教授：Pericyte-specific targeting for kidney disease and complication
3. 蔡沛學教授：Nanoparticulated antioxidant mitigates chemotherapy compound-induced kidney injury

(三) 第 90 次比較病理研討會邀請專題演講：

趙載光醫師：Diagnostic approach for unusual glomerular diseases

三、 舉辦學術病理切片病例討論

(一) 於第 89 次比較病理研討會共有 5 個單位提供 5 個病例供會員討論。

(二) 於第 91 次比較病理研討會共有 6 個單位提供 6 個病例供會員討論。

四、 架設學會網站（網址：<http://www.ipv.nchu.edu.tw/cscp/>）

- (一) 提供第 89 次比較病理研討會活動花絮照片
- (二) 提供第 90 次比較病理研討會活動花絮照片
- (三) 提供第 91 次比較病理研討會活動花絮照片

五、 獸醫師繼續教育學分認證

- (一) 第 89 次比較病理研討會提供獸醫師繼續教育認證
- (二) 第 90 次比較病理研討會提供獸醫師繼續教育認證
- (三) 第 91 次比較病理研討會提供獸醫師繼續教育認證

中華民國比較病理學會資料庫使用須知

How-To Access Comparative Pathology Virtual Slides

Hosted at the Web Library in NTU Vet Med Digital Pathology Lab

(中華民國比較病理學會數位式組織切片影像資料庫)

Comparative Pathology glass slides are now digitalized and accessible to all participants through the internet and a web browser (see below for detail instruction).

1. Please make sure that your web browser (e.g. Internet Explorer, Firefox or Safari) is equipped with "flash player." If not, it can be added from <http://www.adobe.com/products/flashplayer/> for free.
2. Please go to the Chinese Society of Comparative Pathology web site at
<http://www.ipv.nchu.edu.tw/cscp/>
3. Choose the slide images (e.g. 63rd CSCP)
4. Pick any case you'd like to read (e.g. case 435-440)

比較病理研討會病例分類一覽表

中華民國比較病理學會

第一次至第八十九次比較病理學研討會病例分類一覽表

腫瘤

病例編號	會議場次	診 斷	動物別	提供單位
1.	1	Myxoma	Dog	美國紐約動物醫學中心
2.	1	Chordoma	Ferret	美國紐約動物醫學中心
3.	1	Ependymoblastoma	Human	長庚紀念醫院
8.	2	Synovial sarcoma	Pigeon	美國紐約動物醫學中心
18.	3	Malignant lymphoma	Human	長庚紀念醫院
19.	3	Malignant lymphoma	Wistar rat	國家實驗動物繁殖及研究中心
24.	3	Metastatic thyroid carcinoma	Human	省立新竹醫院
25.	3	Chordoma	Human	新光吳火獅紀念醫院
34.	4	Interstitial cell tumor	Dog	中興大學獸醫學系
35.	4	Carcinoid tumor	Human	長庚紀念醫院
36.	4	Hepatic carcinoid	Siamese cat	美國紐約動物醫學中心
38.	6	Pheochromocytoma	Ferret	美國紐約動物醫學中心
39.	6	Extra adrenal pheochromocytoma	Human	新光吳火獅紀念醫院
40.	6	Mammary gland fibroadenoma	Rat	國家實驗動物繁殖及研究中心
41.	6	Fibroadenoma	Human	省立豐原醫院
42.	6	Canine benign mixed type mammary gland tumor	Pointer bitch	中興大學獸醫學系
43.	6	Phyllodes tumor	Human	台中榮民總醫院
44.	6	Canine oral papilloma	Dog	台灣大學獸醫學系
45.	6	Squamous cell papilloma	Human	中國醫藥學院
47.	7	1. Lung: metastatic carcinoma associated with cryptococcal infection. 2. Liver: metastatic carcinoma. 3. Adrenal gland, right: carcinoma (primary)	Human	三軍總醫院
56.	8	Gastrointestinal stromal tumor	Human	台中榮民總醫院

59.	8	Colonic adenocarcinoma	Dog	美國紐約動物醫學中心
62.	8	Submucosal leiomyoma of stomach	Human	頭份為恭紀念醫院
64.	8	1. Adenocarcinoma of sigmoid colon 2. Old schistosomiasis of rectum	Human	省立新竹醫院
71.	9	Myelolipoma	Human	台北耕莘醫院
72.	9	Reticulum cell sarcoma	Mouse	國家實驗動物繁殖及研究中心
73.	9	Hepatocellular carcinoma	Human	新光吳火獅紀念醫院
74.	9	Hepatocellular carcinoma induced by aflatoxin B1	Wistar rats	台灣省農業藥物毒物試驗所
	10	Angiomyolipoma	Human	羅東博愛醫院
	10	Inverted papilloma of prostatic urethra	Human	省立新竹醫院
	10	Nephrogenic adenoma	Human	國泰醫院
	10	Multiple myeloma with systemic amyloidosis	Human	佛教慈濟綜合醫院
	10	Squamous cell carcinoma of renal pelvis and calyces with extension to the ureter	Human	台北病理中心
	10	Fibroepithelial polyp of the ureter	Human	台北耕莘醫院
90.	10	Clear cell sarcoma of kidney	Human	台北醫學院
93.	11	Mammary gland adenocarcinoma, complex type , with chondromucinous differentiation	Dog	台灣大學獸醫學系
94.	11	1. Breast, left, modified radical mastectomy, showing papillary carcinoma, invasive 2. Nipple, left, modified radical mastectomy, papillary carcinoma, invasive 3. Lymph node, axillary, left, lymphadenectomy, palillary carcinoma, metaststic	Human	羅東聖母醫院
95.	11	Transmissible venereal tumor	Dog	中興大學獸醫學系
96.	11	Malignant lymphoma, large cell type, diffuse, B-cell phenotype	Human	彰化基督教醫院
97.	11	Carcinosarcomas	Tiger	台灣養豬科學研究所
98.	11	Mucinous carcinoma with intraductal carcinoma	Human	省立豐原醫院

99.	11	Mammary gland adenocarcinoma, type B, with pulmonary metastasis, BALB/cBYJ mouse	Mouse	國家實驗動物繁殖及研究中心
100.	11	Malignant fibrous histiocytoma and paraffinoma	Human	中國醫藥學院
102.	11	Pleomorphic adenoma (benign mixed tumor)	Human	佛教慈濟綜合醫院
103.	13	Atypical central neurocytoma	Human	新光吳火獅紀念醫院
	13	Cardiac schwannoma	SD rat	國家實驗動物繁殖及研究中心
	13	Desmoplastic infantile ganglioglioma	Human	高雄醫學院
	13	1.Primary cerebral malignant lymphoma 2.Acquired immune deficiency syndrome	Human	台北市立仁愛醫院
	13	Schwannoma	Human	三軍總醫院
	13	Osteosarcoma	Dog	美國紐約動物醫學中心
	14	Mixed germ-cell stromal tumor, mixed sertoli cell and seminoma-like cell tumor	Dog	美國紐約動物醫學中心
	14	Krukenberg's Tumor	Human	台北病理中心
	14	Primary insular carcinoid tumor arising from cystic teratoma of ovary.	Human	花蓮慈濟綜合醫院
	14	Polypoid adenomyoma	Human	大甲李綜合醫院
	14	Gonadal stromal tumor	Human	耕莘醫院
	14	Gestational choriocarcinoma	Human	彰化基督教醫院
	14	Ovarian granulosa cell tumor	Horse	中興大學獸醫學系
	15	Kaposi's sarcoma	Human	華濟醫院
	15	Basal cell carcinoma (BCC)	Human	羅東聖母醫院
	15	Transmissible venereal tumor	Dog	臺灣大學獸醫學系
	17	Canine Glioblastoma Multiforme in Cerebellopontine Angle	Dog	中興大學獸醫病理研究所
143	18	Osteosarcoma associated with metallic implants	Dog	紐約動物醫學中心
144	18	Radiation-induced osteogenic sarcoma	Human	花蓮慈濟綜合醫院
145	18	Osteosarcoma, osteogenic	Dog	臺灣大學獸醫學系
146	18	Pleomorphic rhabdomyosarcoma	Human	行政院衛生署新竹醫院

147	18	Papillary Mesothelioma of pericardium	Leopard	屏東科大學獸醫學系
148	18	Cystic ameloblastoma	Human	台北醫學院
149	18	Giant cell tumor of bone	Canine	中興大學獸醫學院
150	18	Desmoplastic small round cell tumor (DSRCT)	Human	華濟醫院
152	18	Hepatocellular carcinoma	Human	羅東聖母醫院
158	20	Hemangiopericytoma	Human	羅東聖母醫院
160	20	Cardiac fibroma	Human	高雄醫學大學病理學科
166	21	Nephroblastoma	Rabbit	紐約動物醫學中心
168	21	Nephroblastoma	Pig	台灣動物科技研究所
169	21	Nephroblastoma with rhabdomyoblastic differentiation	Human	高雄醫學大學病理科
172	21	Spindle cell sarcoma	Human	羅東聖母醫院
174	21	Juxtaglomerular cell tumor	Human	新光醫院病理檢驗科
190	27	Angiosarcoma	Human	高雄醫學大學病理學科
192	27	Cardiac myxoma	Human	彰化基督教醫院病理科
194	27	Kasabach-Merrit syndrome	Human	慈濟醫院病理科
195	27	Metastatic hepatocellular carcinoma, right atrium	Human	新光醫院病理科
197	27	Papillary fibroelastoma of aortic valve	Human	新光醫院病理科
198	27	Extraplacental chorioangioma	Human	耕莘醫院病理科
208	30	Granulocytic sarcoma (Chloroma) of uterine cervix	Human	高雄醫學大學病理學科
210	30	Primary non-Hodgkin's lymphoma of bone, diffuse large B cell, right humerus	Human	彰化基督教醫院病理科
213	30	Lymphoma, multi-centric type	Dog	中興大學獸醫系
214	30	CD30 (Ki-1)-positive anaplastic large cell lymphoma (ALCL)	Human	新光醫院病理科
215	30	Lymphoma, mixed type	Koala	台灣大學獸醫學系
217	30	Mucosal associated lymphoid tissue (MALT) lymphoma, small intestine	Cat	臺灣大學獸醫學研究所
	31	Nasal type NK/T cell lymphoma	Human	高雄醫學大學病理科
	31	Acquired immunodeficiency syndrome	Human	慈濟醫院病理科

		(AIDS)with disseminated Kaposi's sarcoma		
	32	Epithelioid sarcoma	Human	彰化基督教醫院病理科
	32	Cutaneous B cell lymphoma, eyelid , bilateral	Human	羅東聖母醫院病理科
	32	Extramammary Paget's disease (EMPD) of the scrotum	Human	萬芳北醫皮膚科病理科
	32	Skin, back, excision, CD30+diffuse large B cell lymphoma, Soft tissue, leg , side not stated, excision, vascular leiomyoma	Human	高雄醫學大學附設醫院病理科
	34	Malignant melanoma, metastasis to intra-abdominal cavity	Human	財團法人天主教耕莘醫院病理科
	34	Vaccine-associated rhabdomyosarcoma	Cat	台灣大學獸醫學系
	34	1. Pleura: fibrous plaque 2. Lung: adenocarcinoma 3. Brain: metastatic adenocarcinoma	Human	高雄醫學大學附設中和醫院病理科
	34	1. Neurofibromatosis, type I 2. Malignant peripheral nerve sheath tumor (MPNST)	Human	花蓮慈濟醫院病理科
	35	Glioblastoma multiforme	Human	羅東聖母醫院
	35	Pineoblastoma	Wistar rat	綠色四季
	35	Chordoid meningioma	Human	高醫病理科
	35	Infiltrating lobular carcinoma of left breast with meningeal carcinomatosis and brain metastasis	Human	花蓮慈濟醫院病理科
	35	Microcystic Meningioma.	Human	耕莘醫院病理科
	36	Well-differentiated fetal adenocarcinoma without lymph node metastasis	Human	新光吳火獅紀念醫院
	36	Adenocarcinoma of lung.	Human	羅東聖母醫院
	36	Renal cell carcinoma	Canine	國立台灣大學獸醫學系獸醫學研究所
	36	Clear cell variant of squamous cell carcinoma, lung	Human	高雄醫學大學附設中和醫院病理科

	37	Metastatic adrenal cortical carcinoma	Human	耕莘醫院病理科
	37	Hashimoto's thyroiditis with diffuse large B cell lymphoma and papillary carcinoma	Human	高雄醫學大學附設中和醫院病理科
	38	Medullar thyroid carcinoma	Canine	臺灣大學獸醫學系
	39	Merkel cell carcinoma	Human	羅東博愛醫院
	39	Cholangiocarcinoma	Human	耕莘醫院病理科
	39	Sarcomatoid carcinoma of renal pelvis	Human	花蓮慈濟醫院病理科
	39	Mammary Carcinoma	Canine	中興大學獸醫學系
	39	Metastatic prostatic adenocarcinoma	Human	耕莘醫院病理科
	39	Malignant canine peripheral nerve sheath tumors	Canine	臺灣大學獸醫學系
	39	Sarcomatoid carcinoma, lung	Human	羅東聖母醫院
	40	Vertebra,T12,laminectomy, metastatic adenoid cystic carcinoma	Human	彰化基督教醫院
	40	rhabdomyosarcoma	Canine	臺灣大學獸醫學系
	40	Fetal rhabdomyosarcoma	SD Rat	中興大學獸醫學系
	40	Adenocarcinoma, metastatic, iris, eye	Human	高雄醫學大學
	40	Axillary lymph node metastasis from an occult breast cancer	Human	羅東博愛醫院
	40	Hepatocellular carcinoma	Human	國軍桃園總醫院
	40	Feline diffuse iris melanoma	Feline	中興大學獸醫學系
	40	Metastatic malignant melanoma in the brain and inguinal lymph node	Human	花蓮慈濟醫院病理科
	41	Tonsil Angiosarcoma	Human	羅東博愛醫院
	41	Malignant mixed mullerian tumor	Human	耕莘醫院病理科
	41	Renal cell tumor	Rat	中興大學獸醫學系
	41	Multiple Myeloma	Human	花蓮慈濟醫院病理科
	41	Myopericytoma	Human	新光吳火獅紀念醫院
	41	Extramedullary plasmacytoma with amyloidosis	Canine	臺灣大學獸醫學系
	42	Metastatic follicular carcinoma	Human	羅東聖母醫院病理科
	42	Primitive neuroectodermal tumor (PNET), T-spine.	Human	羅東博愛醫院病理科
	42	Hemangioendothelioma of bone	Human	花蓮慈濟醫院病理科

	42	Malignant tumor with perivascular epithelioid differentiation, favored malignant PEComa	Human	彰化基督教醫院
	43	Mucin-producing cholangiocarcinoma	Human	基隆長庚醫院
	43	Cutaneous epitheliotropic lymphoma	Canine	臺灣大學獸醫專業學院
	43	Cholangiocarcinoma	Felis Lynx	臺灣大學獸醫專業學院
	43	Lymphoma	Canine	臺灣大學獸醫專業學院
	43	Solitary fibrous tumor	Human	彰化基督教醫院
	43	Multiple sarcoma	Canine	臺灣大學獸醫專業學院
	44	Malignant solitary fibrous tumor of pleura	Human	佛教慈濟綜合醫院暨慈濟大學
	44	Ectopic thymic carcinoma	Human	彰濱秀傳紀念醫院病理科
	44	Medullary carcinoma of the right lobe of thyroid	Human	彰化基督教醫院病理科
	44	Thyroid carcinosarcoma with cartilage and osteoid formation	Canine	臺灣大學獸醫專業學院
	44	Lymphocytic leukemia/lymphoma	Koala	臺灣大學獸醫專業學院
	45	Neuroendocrine carcinoma of liver	Human	佛教慈濟綜合醫院暨慈濟大學
	45	Parachordoma	Human	羅東博愛醫院病理科
	45	Carcinoma expleomorphic adenoma, submandibular gland	Human	天主教耕莘醫院病理科
	45	Melanoma, tongue	Canine	國立臺灣大學獸醫專業學院
	45	Renal cell carcinoma, papillary type	Canine	國立臺灣大學獸醫專業學院
323	46	Metastatic papillary serous cystadenocarcinoma, abdomen	Human	國軍桃園總醫院
324	46	Malignant gastrointestinal stromal tumor	Human	天主教耕莘醫院
329	47	Sclerosing stromal tumor	Human	彰化基督教醫院
330	47	Pheochromocytoma	Human	天主教耕莘醫院
334	48	Metastatic infiltrating ductal carcinoma, liver	Human	佛教慈濟綜合醫院

335	48	Adenoid cystic carcinoma, grade II, Rt breast	Human	天主教耕莘醫院
336	48	Malignant lymphoma, diffuse, large B-cell, right neck	Human	林新醫院
337	48	Pulmonary carcinoma, multicentric	Dog	國立臺灣大學 獸醫專業學院
338	48	Malignant melanoma, multiple organs metastasis	Rabbit	國立中興大學獸醫學院
340	49	Mucinous-producing urothelial-type adenocarcinoma of prostate	Human	天主教耕莘醫院
342	49	Plexiform fibromyxoma	Human	彰化基督教醫院
343	49	Malignant epithelioid trophoblastic tumor	Human	佛教慈濟綜合醫院
344	49	Epithelioid sarcoma	Human	林新醫院
346	49	Transmissible venereal tumor	Dog	國立臺灣大學獸醫專業學院
347	50	Ewing's sarcoma (PNET/ES tumor)	Human	天主教耕莘醫院病理科
348	50	Malignant peripheral nerve sheath tumor, epithelioid type	Human	林新醫院病理科
349	50	Low grade fibromyxoid sarcoma	Human	高雄醫學大學附設 中和紀念醫院病理科
351	50	Orbital embryonal rhabdomyosarcoma	Dog	Gifu University, Japan (岐阜大學)
354	50	Granular cell tumor	Dog	國立臺灣大學 獸醫專業學院
356	50	Malignant neoplasm of unknown origin, cerebrum	Dog	國立臺灣大學 獸醫專業學院
357	51	Small cell Carcinoma, Urinary bladder	Human	天主教耕莘醫院
364	51	Perivascular epithelioid cell tumor, in favor of lymphangiomyomatosis	Human	高雄醫學大學附設中和 紀念醫院病理科
365	52	Angiosarcoma, skin (mastectomy)	Human	天主教耕莘醫院病理科
366	52	Rhabdomyoma (Purkinjeoma), heart	Swine	屏東縣家畜疾病防治所
368	52	Langerhans cell sarcoma, lung	Human	高雄醫學大學附設中和 紀念醫院病理科
369	52	Biliary cystadenocarcinoma, liver	Camel	國立屏東科技大學獸醫 教學醫院病理科
371	52	Malignant melanoma, nasal cavity	Human	羅東博愛醫院病理科

373	53	Malignant giant cell tumor of tendon sheath	Human	天主教耕莘醫院病理科
376	53	Malignant mesothelioma of tunica vaginalis	Golden hamster	中興大學獸醫病理生物學研究所
377	53	Perivascular Epithelioid Cell Tumor (PEComa) of the uterus	Human	彰化基督教醫院病理科
378	53	Medullary carcinoma	Human	高雄醫學大學病理科
389	55	Mantle cell lymphoma involving ascending colon, cecum, ileum, appendix and regional lymph nodes with hemorrhagic necrosis in the colon and leukemic change.	Human	奇美醫院病理科
390	55	Pulmonary Squamous Cells Carcinoma of a Canine	Dog	國立屏東科技大學獸醫教學醫院病理科
391	55	Squamous cell carcinoma, lymphoepithelioma-like type	Human	高醫附設醫院病理科
393	55	Malignant peripheral nerve sheath tumor (MPNST), subcutis, canine.	Dog	中興大學獸醫學系
394	55	Desmoplastic malignant melanoma (mimic malignant peripheral nerve sheath tumor)	Human	中山醫學大學醫學系病理學科暨附設醫院病理科
397	56	Atypical meningioma	Human	奇美醫院病理科
401	57	Lymph nodes, excision - Hodgkin's lymphoma, mixed cellularity	Human	天主教耕莘醫院
402	57	1. Leukemia, nonlymphoid, granulocytic, involving bone marrow, spleen, liver, heart, lungs, lymph nodes, kidney, hardian gland, duodenum and pancreas. 2. Pinworm infestation, moderate, large intestines. 3. Fibrosis, focal, myocardium.	Mouse	國家實驗動物中心
403	57	Non-secretory multiple myeloma with systemic amyloidosis	Human	佛教慈濟綜合醫院暨慈濟大學病理科
404	57	1. Hepatocellular adenocarcinoma, multifocal, severe, liver 2. Hemorrhage, moderate, acute, body cavity 3. Bumble foot, focal, mild, chronic, food pad	Goose	國立中興大學獸醫病理生物學研究所

		4. cyst and atherosclerosis, chronic, testis		
406	57	Castleman's disease	Human	羅東博愛醫院
407	58	Hepatoid adenocarcinoma of colon with multiple liver metastases	Human	羅東博愛醫院
408	58	Cardiac and pulmonary melanoma	Pig	國立中興大學獸醫病理生物學研究所
409	58	Double Tumors: (1) small cell carcinoma of lung (2) Hodgkin's lymphoma, mixed cellularity type. Acrokeratosis paraneoplastica	Human	佛教慈濟綜合醫院暨慈濟大學病理科
410	58	Von Hippel-Lindau disease	Human	奇美醫院病理科
411	58	Multiple neoplasia	Tiger	國立屏東科技大學獸醫教學醫院病理科
412	58	Hepatocellular carcinoma and multiple myeloma	Human	中山醫學大學醫學系病理學科暨附設醫院病理科
413	59	DEN plus AAF carcinogens induced hepatic tumor in male rats	Rat	中興大學獸醫病理生物學研究所
417	59	Alveolar soft part sarcoma	Human	高雄醫學大學附設中和紀念醫院病理科
418	60	Seminoma associated with supernumerary testicles	Human	羅東博愛醫院
422	61	Retinoblastoma in a baby girl	Human	彰化基督教醫院
423	61	Colloid goiter in a female Radiated tortoise (<i>Astrochelys radiata</i>)	Tortoise	台灣大學獸醫專業學院分子暨比較病理生物學研究所
424	61	Lymphoepithelial carcinoma in a women	Human	羅東博愛醫院
425	61	Histiocytic sarcoma in a SJL/J mouse	mouse	國家實驗動物中心
428	62	Malignant lymphoma, diffuse large B-cell (DLBCL) in a women	Human	國軍桃園總醫院病理檢驗部
429	62	Immune reconstitution inflammatory syndrome (IRIS)-associated Kaposi's sarcoma in a man	Human	花蓮慈濟醫院
430	62	Mammary adenocarcinoma, tubular form in a female feline	Cat	中興大學獸醫病理生物學研究所

433	62	Rhabdomyosarcoma, retroperitoneal cavity in a female mouse	Mouse	國家實驗動物中心
434	62	Malignant pheochromocytoma with pleural metastasis in a man	Human	天主教聖馬爾定醫院病理科
436	63	Primary non-Hodgkins lymphoma of terminal ileum	Human	國軍桃園總醫院病理檢驗部
438	63	Ectopic thyroid gland tumor	Beagle	台灣大學獸醫專業學院分子暨比較病理生物學研究所
440	63	Hepatocellular cell carcinoma Squamous cell carcinoma	Human	天主教聖馬爾定醫院口腔顎面外科
442	64	Large B cell lymphoma in a man	Human	羅東博愛醫院
444	64	Olfactory neuroblastoma in a female cat	Cat	台灣大學獸醫專業學院分子暨比較病理生物學研究所
445	64	Oligodendrogloma in a man	Human	國軍桃園總醫院病理檢驗部
447	64	Ameloblastoma of mandible in a man	Human	天主教聖馬爾定醫院口腔顎面外科
448	65	EBV associated extranodal NK / T-cell lymphoma, nasal type	Human	羅東博愛醫院
451	65	Mouse, subcutaneously mass – exocrine pancreatic adenocarcinoma, AsPC-1 cells, human origin, heterotopical model	Mouse	國家實驗動物中心
452	65	1. Extranodal NK/T-cell lymphoma, nasal type 2. Regional lymph nodes and omentum are involved.	Human	台中醫院
457	66	Metastatic squamous cell carcinoma (SCC)	Horse	台灣大學獸醫專業學院分子暨比較病理生物學研究所
459	66	Squamous intraepithelial lesion (SIL)	Human	高雄醫學大學附設醫院病理科
460	66	Subcutaneous liposarcoma and uterine endometrial stromal sarcoma	African hedgehog	中興大學獸醫病理生物學研究所

463	67	Splenic undifferentiated pleomorphic sarcoma in a Djungarian hamster	Hamster	國立中興大學獸醫教學醫院鳥禽與野生動物科
465	67	Plasmacytoid urothelial carcinoma	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
467	67	1.Poorly differentiated hemangiosarcoma in face 2.Squamous cell carcinoma in ear	Civet	農委會特有生物研究保育中心
473	68	Simple mammary gland adenocarcinoma	Guinea pig	中興大學獸醫病理生物學研究所
476	69	Mediastinum dedifferentiated liposarcoma	Human	羅東博愛醫院
477	69	Uterus adenosarcoma	Hedgehog	中興大學獸醫病理生物學研究所
478	69	Primary pericardial mesothelioma in a woman	Human	佛教慈濟綜合醫院暨慈濟大學病理科
479	69	Pulmonary solid adenocarcinoma	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
481	70	Paraganglioma of liver	Human	佛教慈濟綜合醫院暨慈濟大學病理科
482	70	Adenocarcinoma, transmural, recurrent, with desmoplasia and metastasis to regional lymph node, jejunum and ileocecal junction Mast cell tumor, moderately-differentiated, multiple, jejunal and ileocecal masses	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
483	70	Solitary fibrous tumor of pelvis	Human	羅東博愛醫院病理科
484	70	Chronic lymphocytic leukemia, with systemic dissemination, bone marrow, intestine, generalized lymph node, spleen, liver, kidney and lung	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
485	70	Intestine, large, colon, ascending, -- Carcinoma, poorly differentiated (pT4aN1b). (ADVANCED) 2. Stomach, distal, --- Adenocarcinoma, moderately	Human	秀傳醫療社團法人秀傳紀念醫院

		differentiated (pT1bNO) (EARLY) (Synchronous cancer)		
487	70	Angiomyolipoma of the liver	Human	衛生福利部臺中醫院病理科
490	71	Xp11.2 translocation renal cell carcinoma	Human	羅東博愛醫院病理科
491	71	Anaplastic renal cell carcinoma	Djungarian hamster	國立中興大學獸醫病理生物學研究所
493	71	Mucin-producing urothelial-type adenocarcinoma of the prostate (MPUAP)	Human	天主教耕莘醫療財團法人耕莘醫院
494	71	Left paratesticular dedifferentiated liposarcoma with leiomyomatous differentiation.	Human	天主教耕莘醫療財團法人耕莘醫院
495	71	Renal nephroblastoma, blastema-predominant with metastasis to gingiva, renal mass	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
496	71	Testis, left: Malignant mixed germ cell–sex cord stromal tumor (spermatocytic germinoma and Sertoli cell tumor), with angiolympathic invasion. Testis, right: Germ cell atrophy, multifocal, moderate.	Dog	長青動物醫院
499	72	Brain, frontal lobe, Lt., Malignant melanoma, consistent with metastatic cutaneous malignant melanoma.	Human	國軍桃園總醫院
501	72	Anaplastic carcinoma thyroid (spindle cell type)	Human	天主教耕莘醫院
502	72	Primitive neuroectodermal tumor (PNET), most likely originating from ureter, with metastasis to liver and involvements of urinary bladder, uterus and left adrenal gland	Formosan serow	臺灣大學獸醫學系
503	72	Metastatic follicular carcinoma	Human	衛生福利部台中醫院
506	73	Type B1 thymoma	Human	天主教耕莘醫院
508	73	Metastatic melanoma	Human	秀傳醫療社團法人秀傳紀念醫院
511	74	Crystal storing histiocytosis associated with multiple myeloma.	Human	羅東博愛醫院病理科

512	74	Myeloid sarcoma	Human	佛教慈濟綜合醫院暨慈濟大學病理科
513	74	Neurolymphomatosis (neurotropic lymphoma), B cell, right musculocutaneous nerve	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
514	74	Primary diffuse large B-cell lymphoma (activated B- cell type) of right testis, Stage IE at least	Human	國防醫學院三軍總醫院病理部
515	74	Thymoma, most likely, mediastinal mass	Dolphin	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
516	74	Extranodal marginal zone lymphoma of mucosa- associated lymphoid tissue (MALT lymphoma)	Human	秀傳醫療社團法人秀傳紀念醫院
517	74	Angioliposarcoma in a Cockatiel	Dog	國立中興大學獸醫病理生物學研究所
520	74	Intravascular diffuse large B cell lymphoma.	Human	國防醫學院三軍總醫院病理部
521	75	Primary anorectal malignant melanoma (PAMM)	Human	國軍桃園總醫院
523	75	Pancreatic panniculitis associated with acinar cell carcinoma	Human	羅東博愛醫院
524	75	Anaplastic large cell lymphoma (ALCL), ALK-negative	Human	秀傳醫療社團法人秀傳紀念醫院
525	75	Canine cutaneous epitheliotropic T-cell lymphoma with the involvement of left axillary lymph node	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
528	75	Basal cell carcinoma with sebaceous differentiation	Human	天主教耕莘醫院
529	76	Tongue, Schwannoma	Human	國軍桃園總醫院
530	76	Amyloid-producing odontogenic tumor	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
531	76	Embryonal rhabdomyosarcoma	Human	花蓮慈濟大學暨慈濟醫院病理科
532	76	Adenocarcinoma, suspected mammary gland tumor metastasis, mass from iris and partially ciliary bodies of right eye	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所

533	76	Kaposi's sarcoma, parotid gland.	Human	羅東博愛醫院病理科
537	77	Primary appendiceal mantle cell lymphoma (MCL), B-cell type, caused acute suppurate appendicitis.	Human	國軍桃園總醫院
538	77	Follicular lymphoma in thyroid of nodular goiter.	Human	羅東博愛醫院
544	78	Ectopic parathyroid adenoma, anterior mediastinum.	Human	羅東博愛醫院
547	79	Glucagonoma, pancreas	Human	羅東博愛醫院
548	79	Neuroendocrine carcinoma, skin	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
549	79	Paraganglioma of urinary bladder	Human	花蓮慈濟大學暨慈濟醫院病理科
550	79	Hepatic carcinoid (Neuroendocrine carcinoma), liver	Cat	霍普獸醫病理診斷中心
551	79	Strumal carcinoid tumor of the ovary (SCTO) arising from mature cystic teratoma	Human	國軍桃園總醫院
552	79	Pheochromocytoma and Associated Cardiomyopathy	Meerkat (<i>Suricata suricatta</i>)	國立中興大學獸醫病理生物學研究所
553	79	Adrenal, left, laparoscopic adrenalectomy --- Pheochromocytoma, malignant. Staging (pT2)	Human	天主教耕莘醫院
554	80	Carcinoma, sweat gland, with metastases to the lung and cerebrum, the left forelimb 3 rd and 4 th digits, skin	North American cougar (<i>Puma concolor couguar</i>)	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
555	80	Angiosarcoma, scalp	Human	羅東博愛醫院
559	80	Sebaceous adenoma	Human	天主教耕莘醫院
560	81	Glioblastoma	Human	天主教耕莘醫院
561	81	Transmissible venereal tumor (TVT)	Dog	霍普獸醫病理診斷中心
562	81	Metastatic small cell carcinoma. Right axillary lymph node.	Human	羅東博愛醫院
563	81	Presumptive chronic myelomonocytic leukemia	Central bearded dragon	國立中興大學獸醫病理生物學研究所

			(<i>Pogona vitticeps</i>)	
564	82	Epithelioid gastrointestinal stromal tumor (GIST)	Human	羅東博愛醫院
566	82	Intestine, small bowel, segmental resection,---Primitive neuroectodermal tumor(PNET) / Extraskeletal Ewing sarcoma Lung, needle biopsy,Small blue cell tumor, compatible with primitive neuroectodermal tumor (PNET) metastasis	Human	衛生福利部台中醫院病理科
567	82	Gastric carcinoma, whit lymphatic infiltration, stomach, dog Lymph node metastasis from gastric carcinoma, dog	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
568	82	Descending colon, adenocarcinoma, grade 2; C/W FAP syndrome associated advanced CRC.	Human	國軍桃園總醫院
569	83	Gastric Schwannoma	Human	羅東博愛醫院
571	83	Feline inductive odontogenic tumor (FIOT), cat	Cat	霍普獸醫病理診斷中心
573	83	Multiple primary malignant (MPM) (Synchronous / metachronous? or metastatic) non-Hodgkin lymphomas (DLBCLs) of the jejunum with JJ intussusception with mesenteric lymph nodal and pleural involvement.	Human	國軍桃園總醫院
574	84	Testicular carcinoid	Human	羅東博愛醫院
577	84	Testis, Lt., Primary diffuse large B-cell lymphoma (DLBCL) / Primary testicular (DLBCL)-PT-DLBCL	Human	國軍桃園總醫院
579	85	Mixed germ cell tumor (seminoma and mature teratoma)	Human	三軍總醫院
580	85	Renal cell carcinoma	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
581	85	Leiomyoma with ovarian sex cord-like elements	Human	羅東博愛醫院
582	85	Endometrial stromal sarcoma and endometrial polyp, uterus	Hedgehog	霍普獸醫病理診斷中心
583	85	Uterine papillary serous carcinoma, metastatic	Human	國軍桃園總醫院

585	86	T-cell rich large B-cell lymphoma (TCRLBCL)	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
586	86	Epithelioid sarcoma, right hand.	Human	羅東博愛醫院
587	86	Precursor T-cell lymphoblastic lymphoma (Pre-T LBL, thymic lymphoma)	Mouse	國立中興大學獸醫病理生物學研究所
588	86	Soft tissue, right hypochondriac (flank), excision: Hepatocellular cell carcinoma (HCC), metastatic.	Human	國軍桃園總醫院
590	87	Glandular cardiac myxoma, heart.	Human	羅東博愛醫院
594	88	Malignant pleural mesothelioma	Human	國軍桃園總醫院
597	88	Bronchial carcinoma	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
598	89	Warthin-like mucoepidermoid carcinom	Human	羅東博愛醫院
599	89	Gastric carcinoma	Dog	長青動物醫院
600	89	Primary appendiceal signet-ring cell carcinoma	Human	國軍桃園總醫院
609	91	Small cell carcinoma, urinary bladder	Human	羅東博愛醫院
610	91	squamous cell carcinoma and urothelial carcinoma in a dog	Dog	國立中興大學獸醫病理生物學研究所
611	91	Primary testicular dedifferentiated liposarcoma	Human	國軍桃園總醫院
612	91	Renal hemangiosarcoma	Dog	霍普獸醫病理診斷中心
613	91	Papillary renal neoplasm with reverse polarity	Human	三軍總醫院
614	91	Nephroblastoma	Feline	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所

細菌

病例編號	會議場次	診 斷	動物別	提 供 單 位
	1	Tuberculosis	Monkey	臺灣大學獸醫學系
7.	1	Tuberculosis	Human	省立新竹醫院
12.	2	H. pylori-induced gastritis	Human	台北病理中心
13.	2	Pseudomembranous colitis	Human	省立新竹醫院
26.	3	Swine salmonellosis	Pig	中興大學獸醫學系

27.	3	Vegetative valvular endocarditis	Pig	台灣養豬科學研究所
28.	4	Nocardiosis	Human	台灣省立新竹醫院
29.	4	Nocardiosis	Largemouth bass	屏東縣家畜疾病防治所
32.	4	Actinomycosis	Human	台灣省立豐原醫院
33.	4	Tuberculosis	Human	苗栗頭份為恭紀念醫院
53.	7	Intracavitory aspergilloma and cavitary tuberculosis, lung.	Human	羅東聖母醫院
54.	7	Fibrocalcified pulmonary TB, left Apex. Mixed actinomycosis and aspergillosis lung infection with abscess DM, NIDDM.	Human	林口長庚紀念醫院
58.	7	Tuberculous enteritis with perforation	Human	佛教慈濟綜合醫院
61.	8	Spirochetosis	Goose	國立嘉義農專獸醫科
63.	8	Proliferative enteritis (<i>Lawsonia intracellularis</i> infection)	Porcine	屏東縣家畜疾病防治所
68.	9	Liver abscess (<i>Klebsillae pneumoniae</i>)	Human	台北醫學院
	10	Xanthogranulomatous inflammation with nephrolithiasis, kidney, right. Ureteral stone, right.	Human	羅東聖母醫院
	10	Emphysematous pyelonephritis	Human	彰化基督教醫院
89.	10	Severe visceral gout due to kidney damaged Infectious serositis	Goose	中興大學獸醫學系
	13	Listeric encephalitis	Lamb	屏東縣家畜疾病防治所
	13	Tuberculous meningitis	Human	羅東聖母醫院
	16	Swine salmonellosis with meningitis	Swine	中興大學獸醫學系
	16	Meningoencephalitis, fibrinopurulent and lymphocytic, diffuse, subacute, moderate, cerebrum, cerebellum and brain stem, caused by <i>Streptococcus</i> spp. infection	Swine	國家實驗動物繁殖及研究中心
	17	Coliform septicemia of newborn calf	Calf	屏東縣家畜疾病防治所

	20	Porcine polyserositis and arthritis (Glasser's disease)	Pig	中興大學獸醫學院
	20	Mycotic aneurysm of jejunal artery secondary to infective endocarditis	Human	慈濟醫院病理科
	21	Chronic nephritis caused by Leptospira spp	Pig	中興大學獸醫學院
	21	Ureteropyelitis and cystitis	Pig	中國化學製藥公司
	36	Pulmonary actinomycosis.	Human	耕莘醫院病理科
	37	Tuberculous peritonitis	Human	彰化基督教醫院病理科
	38	Septicemic salmonellosis	Piglet	屏東科技大學獸醫系
	38	Leptospirosis	Human	慈濟醫院病理科
	39	Mycobacteriosis	Soft turtles	屏東科技大學獸醫系
	42	Staphylococcus spp. infection	Formosa Macaque	中興大學獸醫病理學研究所
	42	Leptospirosis	Dog	台灣大學獸醫學系
	43	Leptospirosis	Human	花蓮慈濟醫院
	43	Cryptococcus and Tuberculosis	Human	彰濱秀傳紀念醫院
319	46	Placentitis, Coxiella burnetii	Goat	台灣動物科技研究所
321	46	Pneumonia, Burkholderia pseudomallei	Goat	屏東縣家畜疾病防治所
339	48	Mycoplasmosis	Rat	國家實驗動物中心
352	50	Chromobacterium violaceum Septicemia	Gibbon	Bogor Agricultural University, Indonesia
353	50	Salmonellosis	Pig	國立中興大學獸醫學院
367	52	Melioidosis (Burkholderia pseudomallei), lung	Human	花蓮慈濟醫院
370	52	Suppurative bronchopneumonia (Bordetellae trematum) with Trichosomoides crassicauda infestation	Rat	國立中興大學獸醫學院
374	53	Pulmonary coccidiomycosis	Human	彰化基督教醫院
375	53	Paratuberculosis in Macaca cyclopis	Macaca cyclopis	國立屏東科技大學獸醫學院
379	53	Bovine Johne's disease (BJD) or paratuberculosis of cattle	Dairy cow	屏東縣家畜疾病防治所
380	53	NTB, Mycobacterium abscessus	Human	佛教慈濟綜合醫院暨慈濟大學病理科

382	54	Leptospirosis	Pig	國立屏東科技大學獸醫學院
384	54	Neisseria Infected Pneumonitis	Cat	中興大學獸醫學系
385	54	Mycobacteria avian complex dacryocyctitis	Human	花蓮佛教慈濟綜合醫院
387	54	Swine Erysipelas	Pig	屏東縣家畜疾病防治所
396	56	Suppurative meningitis caused by Streptococcus spp in pigs	Pig	國立中興大學獸醫病理生物學研究所
399	56	Listeric encephalitis in dairy goats	Goat	屏東縣家畜疾病防治所
435	63	Tuberculosis	Human	花蓮佛教慈濟綜合醫院
438	63	Porcine proliferative enteritis (PPE)	Pig	國立中興大學獸醫病理生物學研究所
446	64	Actinomycosis (lumpy jaw) in a dairy cattle	Cattle	國立中興大學獸醫病理生物學研究所
450	65	Mycobacterium avium infection	Human	花蓮佛教慈濟綜合醫院
464	67	Ulcerative actinomycotic squamous plaque with focal (basal) severe dysplasia, mucosa, gingivobuccal junction, right lower gingiva in a man	Human	嘉義聖馬爾定醫院
469	68	Scrub typhus	Human	佛教慈濟綜合醫院暨慈濟大學
489	71	Malakoplakia due to Escherichia coli infection, left testis	Human	佛教慈濟綜合醫院暨慈濟大學
492	71	Cystitis, bilateral ureteritis and pyelonephritis, hemorrhagic, necrotic, purulent, severe, diffuse, chronic progressive, urinary bladder, ureters and kidneys	Dog	國立中興大學獸醫病理生物學研究所
522	75	Secondary syphilis	Human	佛教慈濟綜合醫院暨慈濟大學
526	75	Dermatophilosis caused by <i>Austwickia chelonaee</i> (<i>basonym Dermatophilus chelonaee</i>) in a free-ranging wild Taiwanese japalure	Taiwanese japalure	台灣大學獸醫學系
584	85	<i>Salmonella Enteritidis</i> Infection in Chicks	Chicks	國立中興大學獸醫病理生物學研究所

病 毒

病例編號	會議場次	診 斷	動物別	提供單位
21.	3	Newcastle disease	Chicken	台灣大學獸醫學系
22.	3	Herpesvirus infection	Goldfish	台灣大學獸醫學系
30.	4	Demyelinating canine distemper encephalitis	Dog	台灣養豬科學研究所
31.	4	Adenovirus infection	Malayan sun bears	台灣大學獸醫學系
50.	7	Porcine cytomegalovirus infection	Piglet	台灣省家畜衛生試驗所
55.	7	Infectious laryngo-tracheitis (Herpesvirus infection)	Broilers	國立屏東技術學院獸醫學系
69.	9	Pseudorabies (Herpesvirus infection)	Pig	台灣養豬科學研究所
78.	10	Marek's disease in native chicken	Chicken	屏東縣家畜疾病防治所
92.	11	Foot- and- mouth disease (FMD)	Pig	屏東縣家畜疾病防治所
101.	11	Swine pox	Pig	屏東科技大學獸醫學系
	13	Pseduorabies	Piglet	國立屏東科技大學
	13	Avian encephalomyelitis	Chicken	國立中興大學
	15	Contagious pustular dermatitis	Goat	屏東縣&台東縣家畜疾病防治所
	15	Fowl pox and Marek's disease	Chicken	中興大學獸醫學系
	16	Japanese encephalitis	Human	花蓮佛教慈濟綜合醫院
	17	Viral encephalitis, polymavirus infection	Lory	美國紐約動物醫學中心
	17	1. Aspergillus spp. encephalitis and myocarditis 2. Demyelinating canine distemper encephalitis	Dog	台灣大學獸醫學系
	19	Enterovirus 71 infection	Human	彰化基督教醫院
	19	Ebola virus infection	African Green monkey	行政院國家科學委員會實驗動物中心
	19	Rabies	Longhorn Steer	台灣大學獸醫學系
	20	Parvoviral myocarditis	Goose	屏東科技大學獸醫學系
	28	SARS	Human	台大醫院病理科
	28	TGE virus	swine	臺灣動物科技研究所

	28	Feline infectious peritonitis(FIP)	Feline	台灣大學獸醫學系
	30	Chicken Infectious Anemia (CIA)	Layer	屏東防治所
219	31	1. Lymph node:Lymphadenitis, with lymphocytic depletion and intrahistiocytic basophilic cytoplasmic inclusion bodies. Etiology consistent with Porcine Circovirus (PCV)infection. 2. Lung: Bronchointerstitial pneumonia, moderate, lymphoplasmacytic, subacute.	Pig	臺灣動物科技研究所
220	31	Cytomegalovirus colitis	Human	彰化基督教醫院病理科
221	31	Canine distemper virus Canine adenovirus type II co-infection	Canine	國家實驗動物繁殖及研究中心
223	32	1. Skin, mucocutaneous junction (lip): Cheilitis, subacute, diffuse, sever, with epidermal pustules, ballooning degeneration, proliferation, and eosinophilic intracytoplasmic inclusion bodies, Saanen goat. 2. Haired skin: Dermatitis, proliferative, lymphoplasmacytic, subacute, diffuse, sever, with marked epidermal pustules, ballooning degeneration, acanthosis, hyperkeratosis, and eosinophilic intracytoplasmic inclusion bodies.	Goat	臺灣動物科技研究所
238	35	Hydranencephaly	Cattle	國立屏東科技大學獸醫學系
248	36	Porcine Cytomegalovirus (PCMV) infection	Swine	國立屏東科技大學獸醫學系
250	36	Porcine respiratory disease complex (PRDC) and polyserositis, caused by co-infection with pseudorabies (PR) virus, porcine circovirus type 2 (PCV 2), porcine reproductive and respiratory syndrome (PRRS)	Swine	屏東縣家畜疾病防所

		virus and Salmonella typhimurium.		
255	37	Vaccine-induced canine distemper	gray foxes	國立台灣大學獸醫學系
265	39	Bronchointerstitial pneumonia (PCV II infection)	Swine	台灣大學獸醫學系
295	42	Feline infectious peritonitis (FIP)	Cat	中興大學獸醫病理所
362	51	Canine distemper virus infection combined pulmonary dirofilariasis	Dog	國家實驗研究院
381	54	Polyomavirus infection of urinary tract	Human	羅東博愛醫院
405	57	Porcine circovirus-associated lymphadenitis	Swine	國立屏東科技大學 獸醫教學醫院病理科
414	59	Rabies virus infection	Human	佛教慈濟綜合醫院暨慈濟大學病理科
415	59	Canine distemper virus infection	Dog	台灣大學獸醫專業學院 分子暨比較病理生物學研究所
420	60	Respiratory syncytial virus infection	Human	佛教慈濟綜合醫院暨慈濟大學病理科
421	60	Porcine epidemic diarrhea (PED)	Piglet	國立中興大學獸醫病理生物學研究所
455	66	Goose Haemorrhagic Polyomaviruses (GHPV)	Goose	農委會家畜衛生試驗所
456	66	HPV associated small cell neuroendocrine carcinoma of uterine cervix	Human	羅東博愛醫院病理科
458	66	Roventricular dilatation disease (PDD)	Cacatuini	國立中興大學獸醫病理生物學研究所
468	68	Avian poxvirus	Eagle	國立中興大學獸醫病理生物學研究所
472	68	Suspected viral infection with secondary aspergillosis	Parrot	國立中興大學獸醫病理生物學研究所
510	73	Porcine reproductive and respiratory syndrome (PRRS)	pig	國立中興大學獸醫病理生物學研究所
542	78	Feline infectious peritonitis (FIP)	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
543	78	Porcine epidemic diarrhea (PED)	Pig	國立中興大學獸醫系
556	80	Cutaneous pigeonpox	Pigeon	國立中興大學獸醫系

596	88	Porcine respiratory disease complex	Pig	國立中興大學獸醫系
602	89	Bovine viral diarrhea-mucosal disease	Cattle	國立中興大學獸醫系

黴菌（含藻類）

病例編號	會議場次	診 斷	動物別	提供單位
23.	3	Chromomycosis	Human	台北病理中心
47.	7	Lung: metastatic carcinoma associated with cryptococcal infection. Liver: metastatic carcinoma. Adrenal gland, right: carcinoma (primary)	Human	三軍總醫院
48.	7	Adiaspiromycosis	Wild rodents	台灣大學獸醫學系
52.	7	Aspergillosis	Goslings	屏東縣家畜疾病防治所
53.	7	Intracavitory aspergilloma and cavitary tuberculosis, lung.	Human	羅東聖母醫院
54.	7	Fibrocalcified pulmonary TB, left Apex. Mixed actinomycosis and aspergillosis lung infection with abscess DM, NIDDM.	Human	林口長庚紀念醫院
105.	13	Mucormycosis Diabetes mellitus	Human	花蓮佛教慈濟綜合醫院
	15	Eumycotic mycetoma	Human	花蓮佛教慈濟綜合醫院
	17	1. Aspergillus spp. encephalitis and myocarditis 2. Demyelinating canine distemper encephalitis	Dog	台灣大學獸醫學系
	43	Systemic Candidiasis	Tortoise	中興大學獸醫學院
	45	Alfatoxicosis in dogs	Canine	國立臺灣大學獸醫專業學院
322	46	Allergic fungal sinusitis	Human	羅東博愛醫院
326	46	Meningoencephalitis, Aspergillus flavus	Cat	國立臺灣大學獸醫專業學院
331	47	Histoplasmosis	Human	花蓮慈濟醫院病理科
332	47	Pulmonary Blastomycosis	Rat	中興大學獸醫學院
355	50	Encephalitozoonosis	Rabbit	國立中興大學獸醫學院

356	50	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院
386	54	Dermatophytic pseudomycetoma	Cat	台灣動物科技研究所
395	56	Systemic Cryptococcus neoformans infection in a Golden Retriever	Dog	國立台灣大學分子暨比較病理生物學研究所
441	63	Protothecosis	Dog	國家實驗動物繁殖及研究中心
449	65	Porcine epidemic diarrhea (PED)	Pig	國立台灣大學分子暨比較病理生物學研究所
519	75	Chicken infectious anemia in chicken	Chicken	國立中興大學獸醫學院
536	77	Skin infection of Orf virus	Human	佛教慈濟醫療財團法人花蓮慈濟醫院
545	78	Candida endocarditis	Human	佛教慈濟醫療財團法人花蓮慈濟醫院
570	83	Protothecosis	Dog	立众生技有限公司
595	88	Cryptococcosis	Cat	霍普獸醫病理診斷中心

寄生蟲（含原蟲）

病例編號	會議場次	診 斷	動物別	提供單位
14.	2	Dirofilariasis	Dog	台灣省家畜衛生試驗所
15.	2	Pulmonary dirofilariasis	Human	台北榮民總醫院
20.	3	Sparganosis	Human	台北榮民總醫院
46.	7	Feline dirofilariasis	Cat	美國紐約動物醫學中心
49.	7	Echinococcosis	Human	台北榮民總醫院
60.	8	Intestinal capillariasis	Human	台北馬偕醫院
64.	8	Adenocarcinoma of sigmoid colon Old schistosomiasis of rectum	Human	省立新竹醫院
66.	8	Echinococcosis	Chapman's zebra	台灣大學獸醫學系
67.	9	Hepatic ascariasis and cholelithiasis	Human	彰化基督教醫院
	13	Parasitic meningoencephalitis, caused by Toxocara canis larvae migration	Dog	臺灣養豬科學研究所
	17	Disseminated strongyloidiasis	Human	花蓮佛教慈濟綜合醫院

	17	Eosinophilic meningitis caused by Angiostrongylus cantonensis	Human	台北榮民總醫院 病理檢驗部
156	19	Parastrongylus cantonensis infection	Formosan gem-faced civet	中興大學獸醫學院
	19	Capillaria hepatica, Angiostongylus cantonensis	Norway Rat	行政院農業委員會 農業藥物毒物試驗所
	29	Colnorchiasis	Human	高雄醫學院附設醫院
	29	Trichuriasis	Human	彰化基督教醫院
	29	Psoroptes cuniculi infection (Ear mite)	Rabbit	農業藥物毒物試驗所
	29	Pulmonary dirofilariasis	Human	和信治癌中心醫院
	29	Capillaries philippensis	Human	和信治癌中心醫院
	29	Adenocarcinoma with schistosomiasis	Human	花蓮佛教慈濟綜合醫院
	41	Etiology- consistent with Spirotrichomonas (Hexamita) muris	Rat	國家實驗動物繁殖及研究中心
327	46	Dermatitis, mange infestation	Serow	中興大學獸醫學院
328	46	Trichosomoides crassicauda, urinary bladder	Rat	國家實驗動物中心
362	51	Canine distemper virus infection combined pulmonary dirofilariasis	Dog	國家實驗研究院
370	52	Suppurative bronchopneumonia (Bordetellae trematum) with Trichosomoides crassicauda infestation	Rat	國立中興大學獸醫學院
416	59	Toxoplasmosis in a finless porpoise	Finless porpoise	國立屏東科技大學獸醫 教學醫院病理科
	63	Liver milk spots in pig	Pig	中興大學獸醫病理生物 學研究所
453	66	Liver fluke infection	Buffalo	中興大學獸醫病理生物 學研究所
471	68	Haemosporidian parasite infection	pigeon	國立台灣大學分子暨比 較病理生物學研究所
540	77	Systemic toxoplasmosis	Ring-tailed lemur	國立台灣大學分子暨比 較病理生物學研究所
4.	1	Cryptosporidiosis	Goat	台灣養豬科學研究所
15.	2	Amoebiasis	Lemur fulvus	台灣養豬科學研究所
16.	2	Toxoplasmosis	Squirrel	台灣養豬科學研究所
17.	2	Toxoplasmosis	Pig	屏東技術學院

				獸醫學系
51.	7	Pneumocystis carinii pneumonia	Human	台北病理中心
57.	8	Cecal coccidiosis	Chicken	中興大學獸醫學系
65.	8	Cryptosporidiosis	Carprine	台灣養豬科學研究所
211	30	Avian malaria, African black-footed penguin	Avian	臺灣動物科技研究所
242	35	Neosporosis	Cow	國立屏東科技大學 獸醫學系
263	38	Intestinal amebiasis	Human	彰化基督教醫院病理科
320	46	Cutaneous leishmaniasis	Human	佛教慈濟綜合醫院
325	46	Myocarditis/encephalitis, Toxoplasma gondii	Wallaby	國立臺灣大學獸醫專業學院
443	65	Brain toxoplasmosis in a man	Human	佛教慈濟綜合醫院病理科
462	67	Toxoplasmosis	Human	佛教慈濟綜合醫院病理科
470	68	Leucocytozoonosis	chickens	中興大學獸醫病理生物學研究所
572	83	Systemic Coccidiosis	ducks	中興大學獸醫病理生物學研究所

立克次體

病例編號	會議場次	診 斷	動物別	提供單位
229	32	Necrotizing inflammation due to scrub typhus	Human	佛教慈濟醫院病理科
251	36	Scrub typhus with diffuse alveolar damage in bilateral lungs.	Human	佛教慈濟醫院病理科

其他

病例編號	會議場次	診 斷	動物別	提供單位
216	30	Cytophagic histiocytic panniculitis with terminal hemophagocytic syndrome	Human	佛教慈濟綜合醫院病理科
359	51	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院

360	51	Septa panniculitis with lymphocytic vasculitis	Human	慈濟綜合醫院暨慈濟大學
9.	2	Perinephric pseudocyst	Cat	台灣大學獸醫學系
10.	2	Choledochocyst	Human	長庚紀念醫院
11.	2	Bile duct ligation	Rat	中興大學獸醫學系
37.	4	Myositis ossificans	Human	台北醫學院
75.	9	Acute yellow phosphorus intoxication	Rabbits	中興大學獸醫學系
76.	10	Polycystic kidney bilateral and renal failure	Cat	美國紐約動物醫學中心
80.	10	Glomerular sclerosis and hyalinosis, segmental, focal, chronic, moderate Benign hypertension	SHR rat	國防醫學院 & 國家實驗動物繁殖及研究中心
83.	10	Phagolysosome-overload nephropathy	SD rats	國家實驗動物繁殖及中心
85.	10	Renal amyloidosis	Dog	台灣養豬科學研究所
89.	10	Severe visceral gout due to kidney damaged infectious serositis	Goose	中興大學獸醫學系
91.	10	Hypervitaminosis D	Orange-rumped agoutis	台灣大學獸醫學系
	14	Cystic endometrical hyperplasia	Dog	臺灣養豬科學研究所
	14	Cystic subsurface epithelial structure (SES)	Dog	國科會實驗動物中心
	15	Superficial necrolytic dermatitis	Dog	美國紐約動物醫學中心
	15	Solitary congenital self-healing histiocytosis	Human	羅東博愛醫院
	15	Alopecia areata	Mouse	國家實驗動物繁殖及研究中心
	17	Avian encephalomalacia (Vitamin E deficiency)	Chicken	國立屏東科技大學獸醫學系
151	18	Osteodystrophia fibrosa	Goat	台灣養豬科學研究所&台東縣家畜疾病防治所
	20	Hypertrophic cardiomyopathy	Pig	台灣大學獸醫學系
	21	Chinese herb nephropathy	Human	三軍總醫院病理部及腎臟科
	21	Acute pancreatitis with rhabdomyolysis	Human	慈濟醫院病理科
	21	Malakoplakia	Human	彰化基督教醫院

	25	Darier's disease	Human	高雄醫學大學病理科
191	27	1. Polyarteritis nodosa 2. Hypertrophic Cardiomyopathy	Feline	台灣大學獸醫學系
193	27	Norepinephrin cardiotoxicity	Cat	台中榮總
196	27	Cardiomyopathy (Experimental)	Mice	綠色四季
212	30	Kikuchi disease (histiocytic necrotizing lymphadenitis)	Lymphadenitis	耕莘醫院病理科
225	32	Calcinosis circumscripta, soft tissue of the right thigh, dog	Dog	台灣大學獸醫所
230	34	Hemochromatosis, liver, bird	Bird	台灣大學獸醫學系
234	34	Congenital hyperplastic goiter	Holstein calves	屏東縣家畜疾病防治所
236	34	Hepatic lipidosis (fatty liver)	Rats	中興大學獸醫學病理學研究所
237	35	Arteriovenous malformation (AVM) of cerebrum	Human	耕莘醫院病理科
244	35	Organophosphate induced delayed neurotoxicity in hens	Hens	中興大學獸醫學病理學研究所
257	37	Severe lung fibrosis after chemotherapy in a child with Ataxia- Telangiectasia	Human	慈濟醫院病理科
294	42	Arteriovenous malformation of the left hindlimb	Dog	台灣大學獸醫學系
299	43	Polioencephalomalacia	Goat kid	屏東家畜疾病防治所
310	44	Hyperplastic goiter	Piglet	屏東家畜疾病防治所
311	44	Melamine and cyanuric acid contaminated pet food induced nephrotoxicity	Rat	中興大學獸醫學病理學研究所
318	45	Alfatoxicosis	Canine	國立臺灣大學獸醫專業學院
333	47	Lordosis, C6 to C11	Penguin	國立臺灣大學獸醫專業學院
341	49	Pulmonary placental transmogrification	Human	羅東博愛醫院
345	49	Acute carbofuran intoxication	Jacana	國立中興大學獸醫學院
350	50	Malakoplakia, liver	Human	慈濟綜合醫院暨慈濟大學
351	50	Eosionphilic granuloma, Right suboccipital epidural mass	Human	羅東博愛醫院病理科
359	51	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院

360	51	Septa panniculitis with lymphocytic vasculitis	Human	慈濟綜合醫院暨慈濟大學
361	51	Hepatotoxicity of SMA-AgNPs	Mouse	國立中興大學獸醫病理生物學研究所
363	51	Hypertrophy osteopathy	Cat	國立臺灣大學獸醫專業學院
372	52	Snake bite suspected, skin and spleen	Monkey (red guenon)	國立臺灣大學獸醫專業學院
383	54	Langerhans cell histiocytosis	Human	聖馬爾定醫院病理科
388	54	Canine protothecosis	Dog	國立臺灣大學獸醫專業學院
392	55	Lithium nephrotoxicity	Human	佛教慈濟綜合醫院暨慈濟大學病理科
398	56	Gamma-knife-radiosurgery-related demyelination	Human	佛教慈濟綜合醫院暨慈濟大學病理科
400	56	Canine Disseminated form Granulomatous Meningoencephalitis (GME)	Dog	國立屏東科技大學獸醫教學醫院病理科
419	60	Mucopolysaccharidosis	Cat	國立中興大學獸醫病理生物學研究所
426	61	Phleboliths in a man	Human	台北醫學大學附設醫院口腔外科口腔病理科
427	61	Visceral gout in a Green iguana (Iguana iguana)	Iguana	中興大學獸醫病理生物學研究所
431	62	pulmonary alveolar proteinosis in a man	Human	羅東博愛醫院病理科
432	62	Congenital pulmonary airways malformation, type 2 in a women	Human	高雄醫學大學附設醫院
437	63	Large solitary luteinized follicular cyst of pregnancy and puerperium	Human	羅東博愛醫院病理科
454	66	Eosinophilic granuloma	Human	佛教慈濟綜合醫院暨慈濟大學病理科
461	67	Intestinal emphysema	Pig	中興大學獸醫病理生物學研究所
466	67	Nodular goiter	Human	彰化秀傳醫院病理科
474	68	Parastrongyliaisis (Previously called Angiostrongyliaisis)	squirrel	中興大學獸醫病理生物學研究所
475	69	Bronchogenic cyst	Dog	國立臺灣大學獸醫專業學院

480	69	Toxic pneumonitis caused by inhalation of waterproofing spray	Dog	中興大學獸醫學病理學研究所
486	70	IgG4-related sclerosing cholangitis (ISC)	Human	天主教耕莘醫療財團法人耕莘醫院
488	70	Crohn's disease	Human	彰化基督教醫院病理部
Gross	64	Hydronephrosis	Pig	中興大學獸醫病理生物學研究所
Gross	65	1. Traumatic pericarditis, severe, chronic progressive, diffuse, heart. 2. Hardware disease	Cattle	中興大學獸醫病理生物學研究所
497	72	Combined central and peripheral demyelination (CCPD)	Dog	國立臺灣大學獸醫專業學院
498	72	Inflammatory demyelinating pseudotumour	Human	佛教慈濟綜合醫院暨慈濟大學病理科
500	72	Ischemic stroke in a dog	Dog	中興大學獸醫病理生物學研究所
504	73	Autoimmune pancreatitis (IgG4 related pancreatitis)	Human	羅東博愛醫院病理科
505	73	Thrombotic microangiopathy with hemorrhagic infarct of brain, acute myocardial ischemia and acute kidney injury	Human	佛教慈濟綜合醫院暨慈濟大學病理科
507	73	The most likely diagnosis is erythema multiforme (EM).	Dog	國立臺灣大學獸醫專業學院
509	73	Doxorubicin-induced diseases	Chicken	中興大學獸醫病理生物學研究所
518	74	Idiopathic multicentric Castleman disease with abundant IgG4-positive cells	Human	佛教慈濟綜合醫院暨慈濟大學病理科
527	75	Coryneform hyperkeratosis in NOG mice	Mice	中興大學獸醫病理生物學研究所
534	76	Multiple Cartilaginous Exostoses Causing Spinal Cord Compression in a Dog	Dog	中興大學獸醫病理生物學研究所
535	76	Chondrodysplasia, diffuse, severe, chronic, growth plate, femur.	Rat	中興大學獸醫病理生物學研究所
539	77	Epitheliotropic mastocytic conjunctivitis	Cat	臺灣動藥國際股份有限公司

541	77	Protothecosis	Dog	國立臺灣大學獸醫專業學院
546	78	Ascites syndrome in broilers	Avian	國立中興大學動物疾病診斷中心
557	80	Systemic lupus erythematosus with erythema multiforme-like lesions, human	Human	佛教慈濟綜合醫院暨慈濟大學病理科
558	80	Pododermatitis, left forelimb and right hindlimb foot pad	Cat	霍普獸醫病理診斷中心
565	82	Intestinal intramural hemorrhage/hematoma, small intestine	Dog	霍普獸醫病理診斷中心
575	84	Ovotestes, epididymis, and uterus, reproductive organs	Cat	霍普獸醫病理診斷中心
576	84	Oxalate nephropathy	Asian yellow pond turtle (柴棺龜 ; Mauremys mutica)	國立中興大學獸醫病理生物學研究所
578	84	Yolk embolism	Savannah monitor	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
589	87	Portosystemic shunt	feline	霍普獸醫病理診斷中心
591	87	Fabry disease	human	三軍總醫院病理科
592	87	Atherosclerosis	mouse	財團法人國家實驗研究院國家實驗動物中心
593	88	Minute pulmonary meningotheelial-like nodules	human	羅東博愛醫院
601	89	Feline gastrointestinal eosinophilic sclerosing fibroplasia	Cat	立眾病理實驗室

會員資料更新服務

各位會員：

您好！如果您的會員資料有更新或誤刊情形，麻煩您填妥表格後寄回學會秘書處或電話連絡：

中華民國比較病理學會秘書處

張晏禎 助理教授

cscptaiwan@gmail.com

02-33663873

106 台北市羅斯福路四段一號 國立台灣大學 獸醫專業學院

-----中華民國比較病理學會-----

會員資料更改卡

姓 名：_____ 會員類別：一般會員

學生會員

贊助會員

最高學歷：_____

服務單位：_____ 職 稱：_____

永久地址：_____

通訊地址：_____

電 話：_____ 傳 真：_____

E-Mail Address : _____

中華民國比較病理學會
誠摯邀請您加入

入會辦法

一、 本會會員申請資格為：

- (一) 一般會員：贊同本會宗旨，年滿二十歲，具有國內外大專院校（或同等學歷）生命科學及其它相關科系畢業資格或高職畢業從事生命科學相關工作滿兩年者。
- (二) 學生會員：贊同本會宗旨，在國內、外大專院校生命科學或其他相關科系肄業者（請檢附學生身份證明）。
- (三) 贊助會員：贊助本會工作之團體或個人。

(四) 榮譽會員：凡對比較病理學術或會務之推廣有特殊貢獻，經理事會提名並經會員大會通過者。

二、 會員：

(一) 入會費：一般會員新台幣壹仟元，學生會員壹佰元，贊助會員伍仟元，於入會時繳納。

(二) 常年會費：一般會員新台幣壹仟元，學生會員壹佰元。

【註：學生會員身份變更為一般會員時，只需繳交一般會員之常年會費】

三、 入會費及常年會費繳交方式：以銀行轉帳或匯款（006 合作金庫銀行、帳號：0190-717-052017、戶名：中華民國比較病理學會）；並請填妥入會申請表連同銀行轉帳交易明細表或匯款單以郵寄或傳真方式寄回中華民國比較病理學會秘書處 張晏禎老師收。地址：106 台北市羅斯福路四段一號 國立台灣大學 獸醫專業學院
電話：02-33663873

中華民國比較病理學會入會申請及會員卡

會電腦編號

姓名	中文	姓別	<input type="checkbox"/> 男 <input type="checkbox"/> 女	出生	民國 年 月 日	出生地
				<input type="checkbox"/> 身份 <input type="checkbox"/> 証		
英文		會員身份： <input type="checkbox"/> 一般 <input type="checkbox"/> 學生 <input type="checkbox"/> 贊助				
學歷	(1)			稱謂(圈選)先生 小姐 醫師 獸醫師 教授 博士		
				研究員 主任 其他:		
	(2)			研究興趣	(1)	
	(3)				(2)	
(4)			(3)			
主要經歷	機關名稱			職務	起	止
					年 月	年 月
					年 月	年 月
					年 月	年 月
現職					年 月	年 月
通訊地址 現在： 電話： 傳真：						
永久： 電話 傳真：						
電子信箱(E-mail)：						
茲贊同 貴會宗旨擬加入為會員嗣後並願遵守一切章共圖發展 此致 中華民國比較病理學會						
申請人 簽章 介紹人 簽章 介紹人 簽章 中華民國 年 月 日						
審核結果						