

**Chinese Society of Comparative Pathology**

中華民國比較病理學會

第 85 次比較病理學研討會

泌尿生殖病理專題



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 111 年 12 月 17 日 (December 17, 2022)

# SCHEDULE

## 85<sup>th</sup> MEETING OF COMPARATIVE PATHOLOGY

中華民國比較病理學會 第 85 次比較病理學研討會暨會員大會

### 泌尿生殖病理討論專題

時間：111 年 12 月 17 日（星期六）

地點：台大動物醫院 B1（基隆路三段 153 號 B1）

電話：02-33663760

Time (時間)	Schedule (議程)		Moderator (主持)
8:30~9:20	Registration (報到)		
9:20~9:30	Opening Ceremony (致詞) 鄭謙仁 理事長		
9:30~10:45	專題演講	主講：趙載光 醫師 / 國防醫學院醫學系副教授 題目：腎臟病理	鄭謙仁 理事長
10:45~11:00	Break		
11:00~11:30	Case 579	Chen, Yuan-Yuei (陳揚睿), M.D.; Peng, Yi-Jen (彭亦仁), M.D. Ph.D.; Chen, Yen-Lin (陳燕麟), M.D. Ph.D.*  Tri-Service General Hospital, Medical Defense Medical Center, Taipei, Taiwan (三軍總醫院, 國防醫學院))	黃威翔 秘書長
11:30~12:00	Case 580	Huang, Yi-Hsiang (黃昱翔), DVM; Liu, Chen-Hsuan (劉振 軒), DVM, PhD; Chang, Hui-Wen (張惠雯), DVM, PhD; Pang, Victor Fei (龐飛), DVM, PhD; Wang, Fun-In (王汎熒), DVM, PhD; Jeng, Chian-Ren (鄭謙仁), DVM, PhD; Chang, Yen-Chen (張晏禎), DVM, PhD; Huang, Wei-Hsiang (黃威 翔), DVM, PhD*  <sup>1</sup> 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)	黃威翔 秘書長
12:00~13:30	午餐 及 理監事會議 (12:00~13:00)		
13:30~14:30	專題演講	主講：麥振權 美國長島大學獸醫學院助理教授 Chun Kuen Mak, DVM, PhD, DACT 題目：Periparturient Diseases in Dogs and Cats	鄭謙仁 理事長
14:30~15:00	Case 581	Chia-Wen, Shih (施洽雯), M.D., M.S. <sup>1</sup> ; Chih-Chi, Chung (莊志 吉), M.D. <sup>2</sup>	黃威翔 秘書長

		<p>1. Department of Pathology, Lotung Poh-Ai Hospital (羅東博愛醫院病理科)</p> <p>2. Department of Obstetrics &amp; Gynecology, Lotung Poh-Ai Hospital (羅東博愛醫院婦產科)</p>	
15:00~15:15	Break		
15:15~15:45	Case 582	<p>Jiang, Jia-Wei (江家瑋), DVM, MS; Tsao, Wen-Tien (曹文恬), DVM, MS; Luo, I-Chi (羅怡琪), DVM, MS</p> <p>HOPE Veterinary Pathology Diagnostic Center (霍普獸醫病理診斷中心)</p>	黃威翔 秘書長
15:45~16:15	Case 583	<p>Chang, Junn-Liang (張俊梁)<sup>1#</sup>, MD, PhD; Liu, Kuang-Ting (劉光庭)<sup>1</sup>, MT, MS; Chang, Yueh-Ching (張月清)<sup>1</sup> MT, MS; Lin, Yu-Gieh (林鈺傑)<sup>1</sup>, MD; Kao, Cheng-Li (高正立)<sup>2</sup> MD</p> <p><sup>1</sup>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)</p> <p><sup>2</sup>Department of Surgery, Division of Urology, Taoyuan Armed Forces General Hospital, Taoyuan City, Taiwan. (國軍桃園總醫院 外科部 泌尿外科)</p> <p>#Taipei Veterans General Hospital Taoyuan Branch (臺北榮民總醫院桃園分院)</p>	黃威翔 秘書長
16:15~16:45	Case 584	<p>Chen-Yang Wu (吳辰洋), DVM<sup>1</sup>; Guan-Ting Shen (沈冠廷), DVM; Yu-Hsuan Liu (劉又瑄), DVM, BS<sup>2</sup>; Jui-Hung Shien (沈瑞鴻), DVM, PhD<sup>1</sup>; Hue-Ying Chiou (邱慧英), DVM, PhD<sup>3</sup>; Jiunn-Wang Liao (廖俊旺), DVM, PhD<sup>3</sup>; Shan-Chia Ou (歐繕嘉), DVM, PhD</p> <p><sup>1</sup>Department of veterinary medicine, National Chung Hsing University (國立中興大學獸醫學系)</p> <p><sup>2</sup>Animal Disease Diagnostic Center, National Chung Hsing University (國立中興大學動物疾病診斷中心)</p> <p><sup>3</sup> Graduate Institute of Veterinary Pathobiology, National Chung Hsing University (國立中興大學 獸醫病理生物學研究所)</p>	黃威翔 秘書長
16:45~	General Discussion (綜合討論) 鄭謙仁 理事長		

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# Special Lecture (專題演講)

上午

腎臟病理

趙載光 醫師

國防醫學院醫學系副教授

三軍總醫院病理部主治醫師



# **Special Lecture (專題演講)**

下午

## **Periparturient Diseases in Dogs and Cats**

**Chun Kuen Mak (麥振權), DVM, PhD, DACT**

**Assistant Professor of Theriogenology**

**Long Island University College of Veterinary Medicine**

The periparturient period in dogs and cats refers to the time between 1-2 weeks prepartum and 6-8 weeks postpartum. During this period, several substantial pregnancy-related physiological events occur, such as hormonal and metabolic changes, parturition, lactation, and uterine involution. Dysregulation of these events could lead to a number of periparturient diseases. The pathophysiology of the selected periparturient diseases in dogs and cats will be discussed. In addition, causes of infectious and non-infectious pregnancy and perinatal losses in dogs and cats will be reviewed. Lastly, examples of periparturient conditions and species-specific terminology will be compared between human and veterinary medicine.





# Case Diagnosis

## 85<sup>th</sup> MEETING OF COMPARATIVE PATHOLOGY

中華民國比較病理學會 第 85 次比較病理學研討會

泌尿生殖病理專題

民國 111 年 12 月 17 日

(閱片網址：<http://www.ivp.nchu.edu.tw/slidecenter.php?id=528>)

Case No.	Presenter	Slide No.	Diagnosis
Case 579	陳燕麟	22-16836-C	Mixed germ cell tumor (seminoma and mature teratoma) <a href="http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2123">http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2123</a>
Case 580	黃昱翔	NTU21-2745A	Renal cell carcinoma, dog <a href="http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2122">http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2122</a>
Case 581	施洽雯	LP22-8580	Leiomyoma with ovarian sex cord-like elements <a href="http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2119">http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2119</a>
Case 582	江家瑋	22-4374	Endometrial stromal sarcoma and endometrial polyp, uterus, hedgehog <a href="http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2117">http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2117</a>
Case 583	張俊梁	225004A	Kidney. Rt., nephroureterectomy: Uterine papillary serous carcinoma, metastatic. Axillary lymph node, cutaneous, excision: Uterine papillary serous carcinoma, metastatic. <a href="http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2120">http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2120</a>
Case 584	吳辰洋	CP22-06005B	<i>Salmonella</i> Enteritidis Infection in Chicks <a href="http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2118">http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2118</a>



**Case Number: 579**

**Slide Number: 22-16836-C**

**Slide View: [http://www.ivp.nchu.edu.tw/ivp\\_slide\\_view.php?id=2123](http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2123)**

Chen, Yuan-Yuei (陳揚睿), M.D., Peng, Yi-Jen (彭亦仁), M.D. Ph.D., and Chen, Yen-Lin (陳燕麟), M.D. Ph.D.\*

Tri-Service General Hospital, Medical Defense Medical Center, Taipei, Taiwan (三軍總醫院, 國防醫學院)

### **CASE HISTORY:**

**Signalment:** A 34-year-old, male, Homo Sapiens

This 34 years old male patient incidentally found a firm mass on his left testis. The mass was gradually enlarged, and dull pain occurred on and off. He denied any systemic diseases before and no other medical history. He went to the local clinic and was referred to GU OPD under the impression of testicular tumor for further evaluation. The lab data showed that AFP was 4.3 ng/ml and  $\beta$ -HCG was 8.12 mIU/mL.

### **Gross Findings:**

The testis was measuring 7.5 x 3.8 x 2.6 cm in size with an irregular border tumor measuring 2.5 x 1.5 cm in size. The tumor was confined in the testis without capsular extension. The tumor showed mild course inner surface and some necrotic substance and hemorrhage were seen. The tumor was white, tan to dark brown and soft with variable thickness and mild elastic firm in foci.

### **CASE RESULT:**

#### **Histopathological Findings:**

Microscopically, the tumor composed of two distinct tumor patterns. One part of the tumor composed of crowded and enlarged neoplastic cells with hyperchromatic nuclei with clear cytoplasm admixed with lymphocytes arranged in sheet pattern. No Schiller duval bodies nor massive hemorrhage were seen.

Another part composed of squamous epithelium lining cyst and cartilage formation were also seen. Variable fibrous tissue at peripheral was identified. No immature components were seen.

**Pathological Diagnosis:** Mixed germ cell tumor (seminoma and mature teratoma)

#### **Differential diagnosis:**

1. Seminoma
2. Lymphoma

3. Sertoli cell tumor
4. Embryonal carcinoma

### **Discussion:**

Seminoma is the most common type of testicular germ cell tumor (up to 50%) and may occur as component of mixed germ cell tumor. Mature teratoma and yolk sac tumor are the two most combination components. Seminoma cells derived from transformed gonocytes and consists of cells with well-defined borders, clear cytoplasm, round to polygonal nuclei and prominent nucleolus. The tumor usually presents in young men (4th to 5th decay) with unilateral palpable mass and rarely occurs older than 70 years old or younger than 20 years old. The pathogenesis of seminoma arises from germ cell neoplasia in situ (GCNIS). GCNIS cells arise from delayed maturation of primordial germ cells with polyploidization resulting in a transformed germ cell. This progresses post puberty into seminoma (most likely GCNIS evolves into intratubular seminoma and then invasive seminoma).

The clinical presentation is usual a testicular mass and lesser than 5% present with metastatic symptoms. Metastases are initially retroperitoneal and then progress to mediastinal and cervical nodes; visceral metastases develop in late disease course.

Serum LDH and PLAP may be elevated, and  $\beta$ -HCG levels are increased in up to 20% of cases. AFP should not be increased; liver disease or non-seminoma component should be considered if AFP elevated. In clinical stage I has 95-98% 5-year survival rate.

The gross description of seminoma is usually well demarcated, homogeneous, solid cream or grey tumors. Surface nodularity and lobulation with minimal necrosis or hemorrhage. Most of the cases (90%) are usually confined to testis. The histologic description showed sheets or lobular configuration of tumor with fibrous septae. Tumor cells are typically pale (glycogen) but may be eosinophilic. Cell membranes are well defined with distinct cell boundaries. Nuclei are polygonal and may have a flat edge giving a squared off appearance and contain one or more prominent central nucleoli. Prominent lymphocytic infiltrate is present (T lymphocytes) with plasma cells. In addition, granulomas noted in up to 50% of cases. Intercellular edema with microcystic spaces and coagulative type necrosis can be present. Multinucleated syncytiotrophoblasts can be seen in 20% of tumors and can produce  $\beta$ -HCG.

PAS stain is positive due to the glycogen cytoplasm. The immunohistochemical stains showed reactive for OCT 3/4, CD117, D2-40, PLAP, SALL4 but non-reactive for CD30, AFP, glypican 3, EMA, Inhibin, p63, PAX8, and GATA3. The cytogenetic alteration showed isochromosome from the short arm of chromosome 12 and KIT mutations are found.

The differential disgnosis should consider lymphoma. However, usually older patients (> 60 years old) and predominantly interstitial involvement between seminiferous tubules are features against seminoma. Moreover, GCNIS can not be identified and immunoreactive for CD45 and CD20

but negative for OCT 3/4 and PLAP. Another rare tumor called sertoli cell tumor should also take into consideration. However, sertoli cell tumor lacks of fibrous bands, lymphocytes and granulomas. In addition, absence of GCNIS and negative for SALL4, PLAP, OCT 3/4 are features against seminoma. Lastly, embryonal carcinoma with greater atypia and indistinct cell borders are features against seminoma. In addition, seminoma is negative for CD30 but positive in embryonal carcinoma.

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**Case Number: 580**

**Slide Number: NTU2021-2745**

**Slide View: [http://www.ivp.nchu.edu.tw/ivp\\_slide\\_view.php?id=2122](http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2122)**

Huang, Yi-Hsiang (黃昱翔), DVM<sup>1</sup>; Liu, Chen-Hsuan (劉振軒), DVM, PhD<sup>1</sup>; Chang, Hui-Wen (張惠雯), DVM, PhD<sup>1</sup>; Pang, Victor Fei (龐飛), DVM, PhD<sup>1</sup>; Wang, Fun-In (王汎熒), DVM, PhD<sup>1</sup>; Jeng, Chian-Ren (鄭謙仁), DVM, PhD<sup>1</sup>; Chang, Yen-Chen (張晏禎), DVM, PhD<sup>1</sup>; Huang, Wei-Hsiang (黃威翔), DVM, PhD<sup>1\*</sup>

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## **CASE HISTORY:**

**Signalment:** Canine, Dachshund, Castrated male, 14 y/o

A cyst-like mass measured 5-cm in diameter was found near to Lt. kidney under abdominal U/S without reaction to the antibiotic therapy in LVH and 320ml of dark brown fluid was aspirated from the mass (cytology and culture: cell debris with negative bacterial culture). Abdominal U/S was performed in NTUVH again and the mass seemed attached directly to Lt. kidney. Laparotomy and Lt. nephrectomy performed at the same day and after incising the cystic mass, some fragile tissue was found (cytology: suspected carcinoma).

## **Gross Findings:**

The specimen was a mass with a large cystic structure attached to the kidney. Dark red material was found in the cystic structure.

## **CASE RESULT:**

### **Histopathological Findings:**

The specimen is a non-encapsulated and poorly demarcated mass attached to and compressing the renal parenchyma. The tumor is composed of papillary of cuboidal, columnar to polygonal neoplastic cells with partially distinct cellular borders. The cytoplasm of the neoplastic cell is eosinophilic with cytoplasmic eosinophilic granules. The nuclei of the neoplastic cells are round to oval and basophilic with 0-2 nucleoli. Mild anisocytosis and anisokaryosis are noted. The mitotic count is 0-2/10 HPFs. Marked angiogenesis, mild hemorrhage with eosinophilic proteinaceous fluids and scattered hemosiderin-laden macrophage are observed in the tumor. The renal parenchyma neighboring the tumor displays severe sclerosing changes and multifocal infiltration of lymphocytes and plasma cells. The surgical margin is clean.



**Histochemical stain:**

1. Masson's trichrome: The mesenchymal of the kidney besides the tumor show strongly cytoplasmic blue (positive for collagen).
2. PAS: The cytoplasm of the neoplastic cells is negative for PAS stain.

**Immunohistochemical stain:**

1. p63: The neoplastic cells are negative for p63 antibody.
2. PAX8: The neoplastic cells are nuclear positive for PAX8 antibody.

**Pathological Diagnosis:**

Renal cell carcinoma, papillary type, with severe chronic nephritis and fibrosis, renal mass

**Differential diagnosis:**

1. Renal cell carcinoma
2. Renal cell adenoma
3. Urothelial cell carcinoma
4. Oncocytoma

**Discussion:**

Renal cell carcinoma is an uncommon tumor in domestic animals, however, it is the most common primary renal tumor in dogs, cats, and horses. Renal cell carcinomas are reported to occur mostly in middle-aged male dogs (mean age 8–9 years), but can be seen in dogs less than 6 years of age with more aggressive behavior.

There are several paraneoplastic syndromes and clinical signs may be possibly correlated to the renal cell carcinoma but nonspecific, including hematuria, palpable abdominal mass, weight loss, leukocytosis, hypertrophic osteopathy, hypoglycemia, hypercalcemia, disseminated intravascular coagulation, anemia and polycythemia. About the anemia or polycythemia occurs in canine renal cell carcinomas. The mechanisms of the anemia are not identified but several factors are probably associated, including anemia of chronic inflammatory disease, hemorrhages, and hematuria. And about the polycythemia, the polycythemia may extremely rarely occur in animals with renal cell carcinomas but occurs in 1-5% of human renal cells carcinomas, and may probably due to excessive production of erythropoietin or erythropoietin-like peptides from the mass.

About the gross findings, renal cell carcinomas are mostly unilateral, but can still be bilateral and multiple mass. The mass typically located in one pole of the kidney with well demarcated appearance. The remaining kidney will be atrophic and compressed. The color of the mass is usually gray or light yellow with darker area of necrosis and hemorrhage.

There are four histologic types of renal cell carcinoma including tubular, solid, papillary, and cystic or multilocular cystic. Tubular RCCs have numerous tubules and acini of various sizes that are the predominant histologic features. Epithelial cells lining tubules range from well differentiated to anaplastic. Some lumina will contain homogeneous secretory material and/or sloughed cells. Stroma

is minimal and desmoplasia absent. Solid RCCs contain epithelial cells arranged closely together. They do not form tubules, acini, or papillae in most of the neoplastic regions. Cell borders are usually distinct and cytoplasm stains lightly. There is considerable variation in cell sizes between different tumors but within one tumor, cells and nuclei tend to be fairly uniform. This is a common pattern in dogs. Papillary RCCs have distinct branching papillae projecting into clear spaces of varying sizes. Papillae may be small and singular within a space or have multiple branches. In cross-section they appear as a circle with cells lining the outside and a central core of stroma and a blood vessel. Cystic or multilocular cystic RCCs are composed of cysts with various sizes lined by benign-appearing epithelial cells and may be empty or contain a lightly stained homogeneous product. Counting mitotic figures is problematic in these tumors, as a majority of the tumor may be acellular. Mitotic count should be started in regions that have mitotic figures or start in a solid region. Multilocular cystic is a variant used in human RCCs and has been used in dogs. Although there is not statistically significant, some studies indicate that multilocular cystic type may be associated with longer survival times.

There are two cytological types of the renal cell carcinoma, including clear cell and chromophobic. Clear cell RCCs are seen more frequently in laboratory animals and human beings, whereas in dogs and cattle they rarely occur. The cytoplasm of the clear cell RCCs is clear under HE stain which is due to high glycogen and lipid content. Most of the clear cell RCCs are found in solid type RCCs rather than tubular RCCs. About the IHC stain in canine clear cell RCC, a study had mentioned that it may show cytoplasmic positive for vimentin and negative for CD117 (KIT). The clear cell RCC is thought to be derived from the proximal convoluted tubules. Chromophobic cell variants have cuboidal cells with granular, lightly to intensely eosinophilic, abundant cytoplasm and distinct cell membranes. They stain positively for colloidal iron<sup>1,29</sup> and are immunoreactive to CD117 (KIT). They may be found in any histologic type of RCC. They should be distinguished from oncocytomas, which are solid tumors filled with cells of similar appearance.

About the IHC staining for the Renal cell carcinomas, the renal cell carcinomas will be positive for the targets such as uromodulin, PAX-8 and Napsin A. And also, in humans, multiple studies had mentioned that the combined use of p63 and PAX8 has yielded greater than 85% sensitivity and nearly 100% specificity when used to differentiate urothelial cell carcinomas from renal cell carcinomas.

About the biological behavior, renal cell carcinomas tend to grow expansively and also peritoneal implantation may occur. Some studies indicate that the metastatic rate is moderate to high in dogs, horses, and cats and rarely in cattle. The most common metastatic sites are lung, liver, and regional lymph nodes. However, other sites such as brain, heart, serosal surfaces, adrenal glands, skin and so on are still being reported.

About the prognosis, the median survival time of canine with renal cell carcinomas may be correlated to the numbers of mitotic count per 10 high power fields. For example, the median survival time will be about 1184 days with the mitotic count lower than 10/10 HPFs, 452 days with the mitotic count range between 10-30/10 HPFs, and 147 days with the mitotic count higher than 30/10 HPFs. Also, some studies indicate that in domestic animals, classification of the histological or cytological subtype is not predictive of biological behavior.

In humans, most of the human clear cell RCCs are correlated to the inactivation of VHL gene due to mutation. And also, angiogenesis may be correlated to the VHL gene mutation and result in overexpression of proangiogenic VEGF. Some studies indicate that upregulation of VEGF may be correlated with high microvessel density, advanced stage tumor progress, and poor prognosis. In dogs, no mutation of VHL gene was identified previously and may reflect the relative rareness of the clear cell RCCs occur in dogs. However, absence of mutation in the canine VHL coding DNA does not exclude the possibility of decreased VHL protein expression.

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**Case Number: 581**

**Slide Number: LP22-8580**

**Slide View:** [http://www.ivp.nchu.edu.tw/ivp\\_slide\\_view.php?id=2119](http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2119)

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### **CASE HISTORY:**

**Signalment:** 40-year-old woman. .

#### **Clinical History:**

A 40-year-old woman who visited the GYN OPD of Lo-Tung Hospital with the chief complaint of back pain for one month and lower abdominal pain for two days. No symptom of abnormal vaginal bleeding. She had past history of right breast cancer and received partial mastectomy on 2011/07/11 and showed pT2N0, then under Tamoxifen treatment. Recurrent right breast cancer was noted and received simple mastectomy on 2015/08/10 and showed pT1cN0. She had no history of hypertensive cardiovascular disease (HCVD) and diabetes mellitus (DM). Vaginal sonographic examination showed an intramural tumor measuring 12.5 x 10.5 x 8.9 cm and an endometrial polyp measuring 2.4 x 1.4 cm. Under the impression of leiomyoma, myomectomy was performed on 2022/08/05. The specimen was sent to the department of pathology for pathologic diagnosis. Grossly, the specimen submitted consisted of a large well-defined tumor measuring up to 12.6 x 11.5 x 10.7 cm. The tumor was grayish-brown in color and elastic firm in consistency. No hemorrhage or necrosis was noted.

#### **Clinical Pathology:**

BUN: 10 mg/dL (6-20 mg/dL), Creatinine: 0.69 mg/dL (0.5-1.1 mg/dL), Glucose: 87 mg/dL (70-100 mg/dL), AST: 14 U/L (5-40 U/L), ALT: 9 U/L (5-40 U/L), Na: 141 mmol/L (135-145 mmol/L), K: 4.1 mmol/L (3.5-5.1 mmol/L), RBC: 4.29x10<sup>6</sup>/uL (4.2-5.4 x10<sup>6</sup>/uL), Hb: 11.7 gm/dL (12.0-16.0 gm/dL), Hct: 36.2 (37.0-54.0%), Plt: 32.3 x10<sup>4</sup>/dL (15-40 x10<sup>4</sup>/dL), WBC: 5.4 x10<sup>3</sup>/uL (4.5 - 11.0 x10<sup>3</sup>/uL), CEA:1.01 ng/mL (<5.0 ng/mL). CA15-3: 17.93 U/mL (<25 U/mL).

### **CASE RESULT:**

#### **Histopathologic Findings:**

Histological analysis showed a well circumscribed tumor and composed of proliferated smooth

muscle fibers mixed with epithelial-like cells with nests, trabecular, and focal glandular structures. The epithelial-like cells were mild irregular in size and shape with round or ovoid mild hyperchromatic nuclei, moderate amount of cytoplasm, indistinct nucleoli. No significant mitotic figure was noted. No necrosis was noted. No lymphatic duct or blood vessel invasion was noted.

**Immunohistochemistry:**

Sections of tissue specimen were subjected for immunohistochemical evaluation. On immunohistochemical analysis, the tumor cells were positive for CD99, CD56, CD10, calretinin, ER and PR, focal positive for actin and WT1, and negative for GATA3, GCDFP-15, CK, EMA, CD34, CD31 and D2-40.

**Differential diagnosis:**

1. Leiomyoma with metastatic breast carcinoma.
2. Leiomyoma with adenomatoid tumor (Leiomyoadenomatoid tumor)..
3. Leiomyoma with endometriosis (Adenomyoma).
4. Leiomyoma with ovarian sex cord-like elements.

**Diagnosis:** Leiomyoma with ovarian sex cord-like elements.

**Comments:**

Sex cord-like elements are rarely observed in uterine lesions, but these morphological patterns could indeed appear in a variety of uterine tumors and non-tumorous lesions. Tumors of the uterus with ovarian sex cord-like elements were first reported by Clement and Scully in 1976. They described two uterine tumor groups with histological resemblances to ovarian sex-cord tumors: Group I consists of typical endometrial stromal tumors (EST) with a sex cord-like contribution as a minor component (10 to 40%) and is mainly composed of endometrial stromal nodules (ESN) and low grade endometrial stromal sarcomas (LGESS), also known as endometrial stromal tumors with sex cord-like elements (ESTSCLE); Group II consists of tumors formed predominantly or exclusively by a sex cord-like component, known as uterine tumor resembling ovarian sex cord tumors (UTROSCT). Except UTROSCT and ESTSCLE, other uterine lesions with morphological features resembling sex cord-like architectures include adenomyosis, endometrial polyp, leiomyoma, epithelioid leiomyosarcoma, adenosarcoma, endometrioid carcinoma, mesonephric and mesonephric-like adenocarcinoma, and so on. Two leiomyomas with sex cord-like features have been reported in one research article and both cases were well-circumscribed. Tumor cells were arranged in cords and tubules and formed gland-like structures, which were plump but with indistinct cytoplasm and nuclear pleomorphism. Fascicles of smooth muscle cells were also observed. There have been numerous efforts to further characterize this unusual group of uterine neoplasms including numerous immunohistochemical and ultrastructural studies attempted to phenotype the sex cord-like cells in UTROSCT and ESTSCLE, with variable evidence supporting

myoid, epithelial, and true sex cord differentiation. Specifically, inhibin and CD99, as well as Melan-A1 and most recently, calretinin, have been utilized as immunohistochemical markers of sex cord differentiation in UTROSCT and ESTSCLE based on application of these markers to sex cord–stromal tumors of the ovary. Most studies support that UTROSCT are polyphenotypic neoplasms with true sex cord differentiation. Previous morphologic and immunohistochemical findings indicate that UTROSCT arise from pluripotent mesenchymal cells, which predominantly differentiate into sex cord cells. Uterine tumors with sex cord-like differentiation usually occur in middle-aged women, the average age is around 50 with no racial predisposition. The main symptoms are abnormal vaginal bleeding and menorrhagia that can cause anemia, and pelvic or abdominal discomfort. The average duration of symptoms before diagnosis is about 2 months. Most patients have an enlarged uterus or a palpable uterine mass. About 10% of tumors are found incidentally after hysterectomies performed for other conditions.

Macroscopically, the tumor is characteristically a solitary, well delineated, round fleshy nodule with a yellow to tan sectioned surface. The median tumor diameter is 4 cm (range 0.8 to 15cm). About two-thirds are purely intramural without any apparent connections to the endometrium. Occasional tumors are cystic, but foci of necrosis and hemorrhage are rare.

Histopathologically, UTROSCT is composed of predominantly morphological features of sex cord-like elements wherein tumor cells arrange in cords, trabeculae, tubules, clusters, sheets, and retiform appearance. Tumor cells in UTROSCT show two features. In most cases, the tumor cells are of small to medium size and oval to spindle in shape, with mild to moderate cell atypia, scanty cytoplasm, and an unobvious nucleolus, similar to the cells of the adult granulosa cell tumors. Additionally, nuclear atypia and mitotic activity are not prominent. In some cases, a striking retiform pattern with interspersed clusters of eosinophilic Leydig-like cells was present, indistinguishable from an ovarian Sertoli–Leydig cell tumor. Eosinophilic cells resembling luteinized stromal cells have been described, as well as foam cells. The histological appearance found endometrial stromal nodules with areas of epithelial-like structures resembles an ovarian sex cord tumors. The stromal nodules have expansile, non-infiltrative margins that compress the surrounding endometrium and myometrium. Minor irregularities of the margin are common, but invasion of the surrounding myometrium indicates that the tumor is a stromal sarcoma, not a stromal nodule.

Immunohistochemically, UTROSCT characteristically exhibits a polyphenotypic immunophenotype with co-expression of hormone receptors, cytokeratin, smooth muscle markers, and markers that are commonly positive in ovarian sex cord–stromal tumors including, inhibin, calretinin, CD56, CD99, Melan-A, steroidogenic factor-1 (SF-1), and FOXL2. Studies have shown that calretinin may be a more sensitive marker than inhibin in this setting, and be of particular use in ovarian sex cord–stromal tumors that are inhibin negative. However, calretinin is less specific than inhibin, with one study reporting positivity in approximately one-quarter of ovarian surface epithelial carcinomas tested, compared with only 2% showing inhibin positivity. CD99 is the MIC2 gene product initially heralded as a marker for Ewing's sarcoma and peripheral neuroectodermal tumor, which, similar to calretinin, stains sex cord–stromal tumors of the ovary and testis as well as

their normal cell counterparts. Membranous CD99 immunostaining can be positive in other mesenchymal uterine neoplasms including leiomyoma variants and endometrial stromal tumors, lessening its utility as a differential diagnostic marker in this setting. However, it is noteworthy that 24 of 28 UTROSCT (86%) have been CD99-positive. Accordingly, authors recommend the use of an immunohistochemical panel to facilitate the diagnosis of UTROSCT, including two markers of sex cord differentiation (calretinin and one of either melan A, CD99, or inhibin), desmin, cytokeratin, and CD10. This panel should discriminate between UTROSCT and smooth muscle neoplasms, as the latter should be negative for sex cord markers, cytokeratin, and usually CD10, but diffusely positive for desmin.

UTROSCT is found to contain the t(X;6)(p22.3;q23.1) and t(4;18)(q21.1;q21.3) translocations, as well as ESR1-NCOA2/3, GREB1-NCOA1/2 and GREB1-CTNNB1 fusions. Among these molecular alterations, ESR1-NCOA3 fusion is predominantly observed. The characteristic ESR1 or GREB1 rearrangement in UTROSCT might be more useful for pathological diagnosis.

Because of the tumors' rarity, there are no randomized studies as to an optimal therapy. Nevertheless, hysterectomy is usually the appropriate therapy because it permit to evaluate the periphery of the tumor and to be certain that it is completely circumscribed and non invasive. UTROSCT were characterized by benign behavior, to distinguish them from endometrial stromal tumors with sex cord-like elements (ESTSCLE; Group I tumors) which were associated with increased risk of recurrence and metastasis. Although favorable histologic features including well-circumscribed borders and an absence of vascular invasion are usually present, these tumors may on occasion show infiltrative borders and focal vascular invasion, Endometrial stromal nodules with focal sex cord-like differentiation tend to relapses and metastasizing. In Clement and Scullys initial report, three of five patients, even with follow-ups, had recurrences and two died . Baker et al found that 15% of reported cases were known to have recurred . Although most UTROSCTs behave benignly, some do recur, and thus, this entity should be considered as a tumor of low malignant potential. Recurrence was determined in about 6.5% of patients. The disease free survival (DFS) was significantly related only to surgery type. None of the pathologic features were associated with DFS. The 5-year DFS was 86% and 96% in patients who underwent organ sparing surgery or not, respectively

#### Conclusion:

Uterine tumorous and non-tumorous lesions may contain sex cord-like elements. Although most UTROSCTs behave benignly, some do recur, and thus, this entity should be considered as a tumor of low malignant potential. The pathologist had a crucial role in diagnosis, often difficult due to the heterogeneity of the tumor. It is of significance for pathologists to acquire a better understanding of these lesions in order to avoid confusion and mistakes during pathological diagnosis, especially in

biopsy/curettage specimens. Correct diagnosis should avoid overtreatment. Hysterectomy is usually the appropriate therapy to evaluate margins.

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**Case Number: 582**

**Slide Number: 22-4374**

**Slide View: [http://www.ivp.nchu.edu.tw/ivp\\_slide\\_view.php?id=2117](http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2117)**

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### **CASE HISTORY:**

**Signalment:** A 4-year-old, intact female, Hedgehog

The animal was referred to Amazon Exotic Animal Hospital in Taipei because of hematuria on 2022/11/16. Dark green dysentery is also noted. The animal has several tumor excision histories, included tail papilloma (2022/1/21), right ear base mast cell tumor (2022/6/10) and left axillary fibrosarcoma (2022/7/8). Laparotomy were performed to check the lesion. Ovariohysterectomy was performed and the swelling ovary and uterus are submitted for pathological examination. The left side uterine horn was larger than right side.

### **Gross Findings:**

The received specimens were bilateral ovaries and uterus. Bilateral uterine horn show swollen and in firm palpation. One (left) side uterine horn was larger than other side (right). On the cut section, the left side uterine horn was in 1.5\*1 cm and the right side was in 0.8\*0.8 cm. Both have polyp-like mass protruding in the lumen of the uterus. The masses were in firm texture and in white to yellowish or in brownish color.

### **CASE RESULT:**

#### **Histopathological Findings:**

Microscopically, bilateral ovaries show no remarkable change. The right (smaller) side uterus has an intraluminal polypoid mass protrudes from the endometrium. The endometrium polyp is composed of both epithelial and stroma cells, together with dilated endometrium gland into cystic structure. The dilated cysts are lined by cuboidal to columnar epithelial cells without cell atypia or malignant appearance. Besides, there are mature adipocytes noted in endometrium polyp. The left (larger) side uterus also has an intraluminal nodule-like mass protrudes from the endometrium. The mass lacks epithelial components and is mostly composed of spindle-shaped stromal cells. The spindle cells arranged in fascicles or a storiform pattern. The neoplastic cells have large, oval, polygonal to spindle nuclei, coarse clump chromatin and inconspicuous or occasionally single prominent nucleolus. The anisocytosis and anisokaryosis is moderated to marked. The mitotic figures are about 1 to 2 per high power fields.

**Pathological Diagnosis:**

Endometrial stromal sarcoma and endometrial polyp, uterus

**Differential diagnosis:**

5. Endometrial polyp
6. Endometrial stromal nodules
7. Endometrial stromal sarcoma
8. Leiomyosarcoma

**Discussion:**

In recent years, the hedgehog has become a popular household pet in the world. The two most common pet hedgehog species are African hedgehog (*Atelerix albiventris*) and European hedgehog (*Erinaceus europaeus*)<sup>[1]</sup>. Their general life span is 1-1.5 years in the wild and 3-8 years in captivity<sup>[8]</sup>. Multiple reviews document that the geriatric hedgehog, although only 3 to 5 years old, is predisposed to neoplastic disease. The average age is 3.5 years. Tumors have been reported in all body organs in hedgehogs. The prevalence of neoplasia has ranged from 29% to 51.5%. Up to 85% of hedgehog tumors are malignant, and they tend to have a poor prognosis. Epithelial tumors are most common, followed by round cell tumors and mesenchymal or spindle cell tumors<sup>[2, 6, 8]</sup>.

Uterine tumors in hedgehogs are common, and in a literature show that most are stromal endometrial origin. The study counted 50 uterine lesions in hedgehogs, tumors accounted for 54%, and followed endometrial hyperplasia (32%) and endometrial polyps (14%)<sup>[9]</sup>. In the aged rat and mouse, most uterine tumors also are of stromal origin. In contrast, most uterine tumors in the dog, cat, horse, goat, cow, and pig, originate from the smooth muscle fibers of the myometrium. In humans, rabbits, and Chinese hamsters, most uterine tumors originate from the endometrial epithelium<sup>[4]</sup>. The reason for these differences is unknown. Almost all the cases with endometrial neoplasia showed hematuria or blood attached to the vulva. Other clinical signs included colpoptosis, abdominal distention, and other non-specific signs, such as a reduction in activity, anorexia, soft feces, and weight loss<sup>[4, 9]</sup>.

Ultrasonography and radiography may help to detect uterine lesion. But it is difficult to distinguish between endometrial hyperplasia and neoplasia without histopathological examinations. The uterine neoplasms were classified into 3 categories by histopathological features, includes endometrial mixed tumors, endometrial stromal nodules, and endometrial stromal sarcomas. However, no examples of adenocarcinoma or leiomyoma were found, even though these are the most common uterine tumors in humans and domestic animals. Mixed tumors were composed of both epithelial and stromal cells with higher cellularity compared to endometrial polyps. Stromal cells were arranged in whorls surrounding the glandular structures. Endometrial stromal nodules lacked epithelial components and were solely composed of spindle-shaped stromal cells. Endometrial stromal sarcomas were composed of spindle-shaped cells which displayed significant pleomorphism and atypia, such as anisocytosis, large nuclei, and prominent nucleoli<sup>[9]</sup>.

In humans, CD10 is expressed in endometrial stromal and decidual cells and has been used as a marker of uterine stromal cell tumors [3]. PR and WT1 are expressed in both normal and neoplastic endometrial stromal cells. In animals, CD10 expression has been detected in the endometrial stromal and decidual cells of monkeys. However, the uterine stromal cells of cats and rabbits are negative for CD10. In hedgehog, CD10, PR, WT1 was positive in spindle cells of the endometrial polyps, endometrial mixed tumors, and endometrial stromal nodules. While the degree of CD10 positivity varied in endometrial stromal sarcomas, as it does in humans. Therefore, the study presumes that CD10 expression was lost during the differentiation of anaplastic tumor cells [5, 9].

In humans, endometrial nodule, endometrial stromal sarcoma, and carcinosarcoma exhibit differentiation into various types of extraendometrial tissue, such as smooth muscle, striated muscle, adipose tissue, and bone [7]. In the endometrial polyps, mixed tumors, and stromal nodules of hedgehogs, the tumor cells differentiated into various types of cells, including adipocytes, granular cells, smooth muscle cells, and osteoid tissue had been reported. In current case, right side uterine horn shows an endometrial polyp with adipose tissue. The left side is composed of stromal tumor. Based on the spindle-shaped cells displayed significant pleomorphism and atypia with high mitotic index, the final diagnosis is endometrial stromal sarcoma.

Ovariohysterectomy is recommended as the treatment of choice for uterine neoplasia, with a good final outcome. The mean survival time of hedgehogs with uterine sarcoma was 303 days (30-784, n=10). Metastasis was documented in only one case [4, 8, 10]. It is important to early diagnosis of reproductive diseases in hedgehogs contributes to better treatment with a positive outcome.

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## Case Number: 583

Slide Number: 225004A

Slide View: [http://www.ivp.nchu.edu.tw/ivp\\_slide\\_view.php?id=2120](http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2120)

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### CASE HISTORY:

A 75-year old woman complained of two weeks of hematuria.

### Clinical history:

A 75-year-old woman had a history of cancer of endometrium s/p radical hysterectomy and bilateral salpingectomy with lymph nodal dissection.

Subsequently, she have received six scheduled chemotherapeutic regimens and radiotherapeutic courses three years ago. Unfortunately, she suffered from hematuria for two weeks. Then she was admitted for further evaluation and treatment.

On admission, the vital signs were BT: 37.4°C, PR: 190/min, RR: 16/min, BP: 128/80mmHg. The patient was no family history of malignancy was found. He denied a history of socializing alcoholic beverages or using illegal drug. He was no any drug allergies and/or adverse reactions, or addiction. He did not report any COVID-19 symptoms. There was no history of smoking, chewing betel nut, occupation, or travel in the past three months. In addition, there was no contributing family history included any relevant genetic information, and psychosocial history. He had a history of endometrioid adenocarcinoma of endometrium status post staging surgery and had received 6th course chemotherapy and radiotherapy. Breast cancer status post modified radical mastectomy with adjuvant radiotherapy for 20+ years ago. She has a type 2 diabetes mellitus and arrhythmia for regular medical treatment for years, and right breast cancer s/p modified radical mastectomy (MRM). Two years ago, she suffered from many palpable mass over the left supraclavicular and axillary for months. She was visited our GS OPD for help. The PET scan revealed the multiple left supraclavicular, axillary, and right hilar lymphadenopathy (SUV>5.2). The sonography of thyroid showed multiple goiters favored. So she was admitted and excisional biopsy of left axillary lymph node was performed. Finally, the pathological diagnosis was metastatic papillary serous carcinoma.

A CT of the abdomen and pelvis revealed a low attenuation lesion in the right lower pole of the kidney measuring approximately 2.5 x 2 cm. and was suggestive of a renal neoplasm. We had low suspicion that the right renal lesion was metastasis and instead were more suspicious of a second primary lesion.

### **Laboratory results (Clinical Pathology) and Imaging study:**

Clinical laboratory abstracted analysis included hematological complete blood count revealed mild leukocytosis with neutrophilia and normal lymphocyte count included Hgb: 10 g/dl (14-18), Hct: 32.8% (normal 42-52), WBC:  $5.29 \times 10^3$  u/l (normal 4.8-10.8), lymphocytes: 17.2 % (normal 19-48). The biochemistry analysis showed glucose: 140 mg/dL (normal 70-110). The biomarker serum levels included CA153: 74 U/mL (normal <32.4), CA125: 107 U/ml (normal <35). The serological evaluations were negative, included the HIV status evaluated by enzyme-linked immunosorbent assay (ELISA) or Western blot studies; detection of hepatitis C virus (HCV) by serologic studies or polymerase chain reaction (PCR); detection of EBV and COVID-19 by PCR was negative. The CT scan of abdomen displayed right pelvic tumor mass and URS+ RP revealed deviation of right ureter in M/3 portion and URS couldn't be proceed. No lesion in L/3 ureter was found. Right RP showed filling defect in right renal pelvis, medial deviation of right ureter. Urine cytology collected in right-sided ureter was also showed positive for malignant cell. Subsequently, she underwent the right nephroureterectomy by senior doctor of Genitourianry (GU) Division. The post-operative period was uneventful and no complication.

### **Gross Findings:**

Macroscopic examination of the nephrectomy of the right kidney submitted measured 10 x 5 x 5 cm attached ureter measures 10 x 0.5 x 0.5 cm, and weighed 200 gm totally. On sections, showed a papillary semisolid spongiform mass measured 3 x 2 x 2 cm over the lower portion of the pelvico-ureteral junction, and a protruded semisolid mass measured 3.5 x 2 x 2 cm over the upper portion of the pelvis with homogeneous light yellow with multifocal hemorrhage and necrosis was also found. The right ureter showed non-remarkable,

### **Case result:**

#### **Histopathologic Findings:**

Microscopic examination of both portions of pelvic tumor masses revealed infiltration of architectures was composed of marked papillary with or without appreciable fibrovascular cores; micropapillary pattern was seen. Slit-like spaces or gland-like spaces was found. There also present solid growth with psammoma bodies may be presented. Cytoplasm usually scant but can be abundant with eosinophilia or clearing. Tumor cells showed discohesive. Nuclei are typically high grade with pleomorphism, hyperchromasia, prominent nucleoli, and frequent abnormal mitotic figures. In addition, tumor cells invaded the hilum, peri-pelvic soft tissue, renal capsule, focal lymphovascular invasion (LVI), and no evidence of renal parenchymal invasion was found,

## Differential Diagnoses:

1. Invasive papillary urothelial carcinoma, high-grade
2. Papillary renal cell carcinoma
3. Endometrial endometrioid adenocarcinoma
4. Endometrioid clear cell adenocarcinoma
5. Mixed carcinoma:  
Endometrioid adenocarcinoma and serous carcinoma types identified

## Immunohistochemistry:

Subsequent IHC staining analysis demonstrated that neoplastic cells were positive for CK7, PAX8 (strong nuclear staining), CD10, CK18, p16, focal for CEA, decreased expression for ER and PR, increased proliferative Ki-67 labelling index expression in approximately 80% of affected tumor cells. The CD31, CD34 and actin were identified lymphovascular tumor emboli. These tumor cells also present negative immunostaining for CK20, p53 (“null type” pattern), GATA-3, TTF1, GCDFP-15, and WT-1. There also present positive for PAS and equivocal for mucin stain. The histopathological and IHC examinations suggested that metastatic endometrial papillary serous carcinoma.

## Anatomic Diagnosis:

1. Kidney. Rt., nephroureterectomy: Uterine papillary serous carcinoma, metastatic.
2. Axillary lymph node, cutaneous, excision: Uterine papillary serous carcinoma, metastatic.

## Follow-up and workup:

After surgery, the patient recovered uneventfully. He also received further arrangement of the adjuvant chemotherapy. Written informed consent was obtained from the patient for this case report.

## Discussion:

Endometrial cancer is the most common gynecologic malignancy and the second most common cause of death from gynecologic cancers. Uterine papillary serous carcinoma, or UPSC, is a rare form of endometrial cancer of the uterus. UPSC can spread faster and may be more likely to come back after treatment than other types of uterine cancer. There are two broad categorizations of endometrial carcinomas included type 1 and Type 2. Type 1 endometrial cancers are estrogen-dependent and are usually diagnosed at earlier stages with often confined to the uterus and are associated with more favorable outcomes. Type 2 endometrial cancers divided into as serous and clear cell, are estrogen-independent with more aggressive, and typically diagnosed at later stages. While only representing approximately 10% of cases of endometrial cancer, serous endometrial carcinomas account for approximately 40% of endometrial cancer deaths.

UPSC is most common normal weight, and postmenopausal bleeding of women and an abnormal Pap test. Several gene mutations that may be investigated with this disease have relatives who have



endometrial, ovarian, and especially pancreatic cancer. UPSC is a highly aggressive malignant endometrial cancer with a high propensity for metastases and recurrences even when there is minimal or no myometrial invasion. It usually metastasizes to the pelvis, retroperitoneal lymph nodes, upper abdomen, and peritoneum. However, disseminating distal axillary lymph node, cutaneous, and kidney metastases from UPSC is extremely rare as our present case. The most common metastatic sites of endometrial cancer are pulmonary, pelvic lymph nodes, and peritoneal. Metastasis to the intra-abdominal organs is rare, and the most common sites of metastasis are liver (7%), adrenal glands, and spleen (1%). However, from review of the literature, renal metastasis from UPSC has not been characterized. Few studies have postulated endometrial carcinoma metastasis to the kidney. Gupta et al. in 2003 reported case who had a 24 year history of endometrial primary cancer with kidney metastasis and concluded that due to the histologic morphology of the renal tumor. Previously, the spread of serous endometrial cancer is similar to that of serous ovarian cancer, which most often spreads through exfoliative malignant cells by the lymphatic vessels.

As a result of these two types of metastasis, the most commonly affected organs are the intraperitoneal organs (colon, stomach, spleen, liver, omentum, peritoneum), para-aortic lymph nodes and pelvic lymph nodes. Though the present patient study have metastasis to axillary lymph node and cutaneous. This patient presented had a final diagnosis of Stage III C2 (AJCC pT1bN2a), grade 3 papillary serous carcinoma of the endometrium with diagnostic pathology consistent with metastatic endometrial cancer in her right kidney. The patient has currently completed four of six cycles of C/T and R/T and is doing well.

Here, we present a case of UPSC with right kidney metastasis that occurred three years after the initial diagnosis. UPSC was first described by Hendrickson et al. in 1982 as a highly malignant form of endometrial cancer. Previous study suggested that UPSC is characterized by p53 gene mutations, p16 gene inactivation, low E-cadherin expression, and HER-2/neu overexpression. The laboratory can show elevated tumor marker CA-125, such as the present case.

UPSC is unique because of its distinct clinicopathological behavior, which distinguishes it from type I endometrioid adenocarcinoma. UPSC histologically and clinically resembles ovarian papillary serous tumors. UPSC typically has a papillary growth pattern with tufted stratification and sometimes hobnail configuration. It has a high degree of cytologic anaplasia. Psammoma bodies are found in 60% of UPSC cases; however, their absence does not rule out UPSC. Tumor necrosis is often a prominent feature. Lymphovascular invasion (LVI) is common. The pattern of spread of UPSC is prominently via LVI. The tumor has a high propensity for metastases and recurrences even when there is minimal or no myometrial invasion. Metastases from gynecological neoplasms to the kidney are uncommon. The primary tumors that metastasize to the kidney, adrenals, in order of frequency, are lung cancer, breast cancer, gastrointestinal tumors, malignant melanoma, and thyroid neoplasms. UPSC has been reported to metastasize to the pericardium, abdominal wall, adrenal, skin, and brain. However, to the best of our knowledge, there is one case report in the English literature of synchronous renal and para-aortic metastasis in a UPSC. Here, we present a case of UPSC in a 75-

year-old woman who developed axillary lymph nodal, cutaneous, and kidney metastases 3 years after initial diagnosis.

Uterine papillary serous carcinoma (UPSC) is an uncommon highly malignant variant of endometrial adenocarcinoma that histologically and clinically resembles papillary serous carcinoma of the ovary. Because UPSC histologically and clinically resembles ovarian papillary serous tumors, metastatic UPSC is difficult to distinguish from metastatic ovarian serous carcinoma. In the present case, the histopathology finding of the surgical specimen of the ovary was negative. Histopathology findings of the metastatic renal lesions demonstrated a pattern similar to uterine carcinoma. Finally, make a differential diagnosis based on immunohistochemical (IHC) method or molecular pathology, which suggests the diagnoses of the renal lesion as metastatic UPSC. It is recommended that patients with UPSC receive multimodal treatment consisting of adjuvant R/T and C/T to reduce the risk of recurrence and to prolong survival. Surgery is the initial part of the management of both early stage (for comprehensive staging) and advanced-stage disease (as a debulking procedure). Since metastases occur even in the absence of myometrial invasion or lymphovascular space involvement, patients should undergo comprehensive surgical staging.

After surgery, UPSC is treated with RT, C/T, or both. Recently, the targeted therapy has discussed, in about 30% of women with UPSC, a gene called HER2/neu makes too many copies of itself. A drug called trastuzumab (Herceptin) targets HER2/neu and blocks it. When researchers used it with regular C/T in trials, trastuzumab helped women with UPSC live longer without their cancer progressing.

We therefore recommend multimodal treatment with adjuvant R/T and C/T in advanced-stage UPSC. Prognostic factors is typically regarded as an aggressive subtype of endometrial cancer. More recent data suggests survival up to 80% for small low-stage tumors. Higher stage, as > 60, race (African American) associated with increased mortality). Since the stage is the strongest prognostic variable, careful surgical staging is important to predict the prognosis of UPSC. CT is widely used for surveillance following treatment with surgery and C/T and R/T. CT reliably distinguishes a renal mass as benign or metastatic. On follow-up CT scan, and invasion into adjacent tissue can help to distinguish a malignant lesion from adenoma. F-FDG PET has a sensitivity of 100%, a specificity of 94%, and an accuracy of 96% in differentiating benign from metastatic adrenal lesions detected on CT.

UPSC is an aggressive variant of endometrial cancer associated with high recurrence rate and poor prognoses. Optimum cytoreductive surgery along with platinum and taxane-based chemotherapy recommends to improve outcome and survival in patients with UPSC. Systemic C/T should be administered as a post-operative adjuvant therapy even when UPSC is confined to the endometrium without regional lymph node spread or LVI. This case also highlights the aggressive behavior of this variant of UPSC and the need for long-term follow-up because the potential for advanced metastasis, as our case.

## **Conclusions**

Metastatic renal disease from USPC is extremely rare and an aggressive variant of endometrial cancer associated with a high recurrence rate and poor prognoses. However, despite the rare occurrence of this pathology, imaging showing a renal mass in addition to possible nodal involvement requires increased awareness and further investigation. Future studies investigating the incidence and outcomes of patients with advanced USPC metastasizing to the kidney may help to optimize treatment for these patients. This is the first case report of disseminating complicated axillary lymph nodal, cutaneous, and kidney metastases from USPC.

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## Case Number: 584

Slide Number: CP22-06005

Slide View: [http://www.ivp.nchu.edu.tw/ivp\\_slide\\_view.php?id=2118](http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2118)

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### **CASE HISTORY**

#### **Signalment:**

50,000 chicks were newly introduced to a tunnel-ventilated, all-in-all-out, floor-feeding broiler farm in central Taiwan. The veterinarian claimed that some 3-day-old chicks revealed emaciation and weakness with 5% morbidity and 3% mortality. Therefore, six 9-day-old sick chicks were submitted to National Chung Hsing University Animal Disease Diagnosis Center for pathological examination on June 22<sup>nd</sup>, 2022.

#### **Clinical signs:**

Depression, lameness, weakness, and neurological symptoms, such as opisthotonos, split-leg, and twitching were found. Yellowish diarrhea was also noticed.

#### **Gross Findings:**

Gel-like appearance and a 6 × 4 mm yellowish plaque were noticed on the caudal surface of bilateral cerebral hemispheres. Thickened pericardium with turbid exudate accumulated in the pericardial sac of the heart. Enlarged livers and kidneys, and incomplete absorption of yolk sacs with cheese-like contents were observed.

### **CASE RESULT**

#### **Histopathologic Findings:**

##### **Cerebrum and cerebellum:**

Multifocal purulent liquefactive necrosis with infiltration of large amount of heterophils and macrophages can be found in cerebrum parenchyma. Thickened meninges, degeneration of neuron cell, microgliosis, and heterophilic perivascular cuffing were noticed in the cerebrum and cerebellum.

Numerous multinucleated giant cells and basophilic bacterial clumps were seen within the necrotic areas. Some of Purkinje cells were found degenerative and necrotic in the cerebellum.

**Yolk sac:**

Large amount of degenerative protein-like contents accumulated in yolk sac, with peripheral infiltration of macrophages and heterophils, and multinucleated giant cells and basophilic bacterial clumps can be seen as well. Thickened fibrosis around the yolk sac was found.

**Heart:**

Thickened pericardium with large amount of necrotic cells and infiltration of macrophages and heterophils.

**Liver:**

Multifocal hydropic degeneration and necrosis of hepatic cells in parenchyma with infiltration of macrophages around portal areas can be seen.

**Kidney:**

There were diffuse hydropic degeneration and mild necrosis of renal tubule, heterophilic infiltration within interstitium and newly differentiated renal tubules.

**Spleen:**

Multifocal eosinophilic necrosis with homogenous exudates were noticed in the center of white pulps.

**Cecum:**

Enterocytes of tips of villi were detached, with necrotic cell debris accumulated in the lumen.

**Morphological diagnosis:**

- Meningoencephalitis, pyogranulomatous, severe, locally extensive, chronic-active, with bacterial colonies, cerebrum and cerebellum
- Pyogranulomatous inflammation, severe, diffuse, chronic-active, bacterial colonies, yolk sac
- Pericarditis, pyogranulomatous, severe, diffuse, chronic-active, heart
- Hepatitis, mild, multifocal, chronic-active, liver
- Nephritis, tubulointerstitial, mild, multifocal, chronic-active, kidney
- Splenitis, mild, multifocal, spleen
- Typhlitis, diffuse, moderate, acute, cecum

**Differential Diagnosis:**

1. Newcastle disease
2. Avian encephalomyelitis
3. Encephalomalacia
4. Bacterial infection

**Laboratory examination:**

1. Microbiological examination

Sampling from brains, hearts, liver, and yolk sacs of sick ducks, using Blood agar plate (TSA contain 5% sheep blood) and MacConkey agar at  $36\text{ }^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$  for micro-aerobic culture (adding 5%  $\text{CO}_2$ ) for 72 hours. Observation was performed every 24 hours for three days. The results showed gray to white, round colonies without hemolysis on BAP; translucent round colonies were seen on MacConkey agar.

## 2. Serotyping

After purification of the colonies grown on the blood agar plate, the bacteria were identified by 16S rRNA sequencing method. The identification result of the bacteria isolated from the above specimen was *Salmonella enterica*. PFGE (Pulsed Field Gel Electrophoresis) was further used in serotyping. Through the comparison of electrophoretogram, the final identification result of the bacteria was *Salmonella* Enteritidis (*S. Enteritidis*).

## Final diagnosis:

*Salmonella* Enteritidis Infection in Chicks

## Discussion:

The differential diagnosis of diseases regarding of clinical symptoms and neurological signs were likely to include Newcastle disease, avian encephalomyelitis, encephalomalacia, and bacterial infection such as salmonellosis, colibacillosis, listeriosis, and pasteurellosis. Because there were no apparent respiratory signs, hemorrhagic mucosa of respiratory and intestinal tracts, necrosis of lymphoid tissue, or lymphocytic infiltration of lesions, Newcastle disease can be excluded. Neither non-purulent encephalitis with lymphocytic infiltration nor apparent central chromatolysis of neurons had been seen in this case, so avian encephalomyelitis can be excluded. Microscopically, small thrombi, aseptic necrosis, and demyelination can be seen in encephalomalacia due to vitamin E deficiency, so it can be excluded in this case. When it comes to bacterial infection, purulent inflammation, and basophilic bacterial clumps were seen in multiple organs microscopically in this case. Furthermore, *S. Enteritidis* was isolated by microbiology examination. Based on the isolates and main lesions, the final diagnosis of this case is *S. Enteritidis* infection in chicks, also known as Fowl paratyphoid.

*Salmonella* spp. is a genus of facultatively anaerobic, rod-shaped Gram-negative bacteria of the family *Enterobacteriaceae*. So far, *Salmonella* spp. can be divided into two species: *S. bongori* and *S. enterica*. According to Kauffman-White classification, over 2600 serotypes can be defined on the basis of the somatic O and flagellar H antigens, more than 200 serotypes of which are found to be pathogenic to human <sup>1</sup>. *Salmonella* spp. is ubiquitous in the environment. It is most active within 35 to 37 °C, and can withstand low temperature to -20 °C. Researchers have found that *S. Enteritidis* can even survive in a chicken farm for 26 months <sup>4</sup>.

Main routes of transmission of *Salmonella* spp. are horizontal and vertical. Routes of direct contact, ingestion of contaminated feed or water are considered as horizontal transmission. Vertical



transmission indicates that *Salmonella* infects eggs in cloaca through penetrating pores of egg shell after attaching or during egg forming stages.

The virulence of *Salmonella* is related to host specificity and *Salmonella* Pathogenicity Island (SPI) which controls both the expression of invasion and replication of *Salmonella* in the intestinal mucosal epithelium. The pathogenesis of horizontal transmission can be divided into the following three stages<sup>1,7</sup>.

Stage 1. Invasion:

*Salmonella* generates acid-chock proteins to defend the acidic barrier of alimentary tracts; and after adhering to the intestinal mucosa with fimbriae, it can produce Type III Secretion System (T3SS) by the expression of SPI-1 accounting for invading host cells<sup>2</sup>.

Stage 2. Survival: Effector proteins from T3SS can assist the replication of *Salmonella* and prevent it from the binding of lysosome and *Salmonella*-containing vesicles (SCVs); while SPI-2 is thought to be associated with resistance of phagocytosis.

Stage 3. Killing: After invading host cells and surviving from initial immune response, the infected cells will form SCVs and be phagocytized by macrophages. *Salmonella* carries on with replication in SCVs, and eventually induce programmed cell death of macrophages. Consequently, pathogens are released to develop further infection.

Following successfully crossing the intestinal mucosa barrier and surviving from immune response, SCV-carrying macrophages undergo systemic dissemination which involves spleen, liver, heart, nervous system, and reproductive system<sup>6</sup>. Regarding to in-egg transmission of vertical routes, when *Salmonella* infects the reproductive system, such as ovaries, oviducts or reproductive glands in between, of hens, it is an opportunity for *Salmonella* to invade the yolk, albumen or shell membrane of eggs<sup>5</sup>. The other way of vertical routes is called on-egg transmission. Pathogens from cloaca, farm personnel, equipment, or contaminated surroundings can attach to eggshell, and then penetrate the eggshell through the pores on it<sup>3</sup>.

Regardless of in-egg or on-egg transmission, *Salmonella* will ultimately invade egg yolk and then carry through proliferation subsequent to conquering against physical or chemical antibacterial effects of albumen and vitelline membrane, resulting in yolk sac infection commonly observed in clinical cases of chicks<sup>5</sup>.

On the basis of history in this case, some of the chicks developed clinical signs from the age of 3 days. It is speculated that the main cause of outbreak is owing to the potential infection of hens in the breeder farm together with the inappropriate temperature or humidity control during incubation and brooding period, resulting in incomplete absorption of yolk sac. Bacteremia subsequent to *Salmonella* infection triggers systemic infection, leading to depression, anorexia, diarrhea, and neurological signs. Malnutrition in chicks happens as a result of incomplete absorption of yolk sac which gives rise to growth retardation and emaciation. Although there is not much evidence to support the possibility of horizontal transmission, such as mutual transmission between chicks, ingestion of contaminated feed or water, and mechanical transmission by rodents, in this case, it cannot be excluded.

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# 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令另定之。

- 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。應於七日以前以書面通知，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 第九屆理監事簡歷冊

序號	職別	姓名	性別	學歷	經歷	現任本職
1	理事長	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所長	台灣大學獸醫學系教授
2	常務理事	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
3	常務理事	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
4	常務理事	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	國防醫學院兼任助理教授
5	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助理教授
6	理事	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
7	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教授
8	理事	阮正雄	男	日本國立岡山大學大學院 醫齒藥總合研究科博士	台北醫學大學副教授兼細胞學中心主任	輔英科技大學附設醫院
9	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
10	理事	祝志平	男	台大病理研究所	台北醫學院講師	彰化秀傳紀念醫院病理部
11	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	國立臺灣大學獸醫專業學院副教授
12	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 助理教授
13	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	耕莘醫院組織病理科主治醫師
14	理事	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	國家實驗動物中心病理獸醫師
15	理事	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	國立臺灣大學獸醫專業學院助理教授
16	常務監事	許永祥	男	國立台大醫學院病理研究所碩士	台大醫院病理科住院醫師	慈濟醫院病理科主任教授

17	監事	蔡慧玲	女			
18	監事	楊俊宏	男	長庚大學生物醫學 研究所博士		農委會農業藥物毒 物試驗所
19	監事	簡耀君	男	國立臺灣大學獸醫 學研究所獸醫學碩 士	長青動物醫院病理 部主任	長青動物醫院病理 部主任
20	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
21	秘書長	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 助理教授

# 中華民國比較病理學會 110 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. 第九屆第二次會員大會於 110 年 4 月 17 日於國立臺灣大學獸醫專業學院召開。

2. 第九屆理監事會議

(1) 第九屆第三次理監事會議於 110 年 4 月 17 日於國立臺灣大學獸醫專業學院召開。

(2) 第九屆第四次理監事會議於 110 年 8 月 14 日於線上舉辦。

(3) 第九屆第五次理監事會議於 110 年 12 月 11 日於國立臺灣大學獸醫專業學院召開。

3. 舉辦學術研討會

(1) 第 80 次比較病理研討會於 110 年 4 月 17 日國立臺灣大學獸醫專業學院召開。

(2) 第 81 次比較病理研討會於 110 年 8 月 14 日線上召開。

(3) 第 82 次比較病理研討會於 110 年 12 月 11 日國立臺灣大學獸醫專業學院召開。

## 二、舉辦學術演講

### (一) 第 80 次比較病理研討會邀請專題演講：

1. 振興醫院解剖病理科蕭正祥主任：動物和人類皮膚汗腺腫瘤的異與同

### (二) 第 81 次比較病理研討會邀請專題演講：

1. 施洽雯醫師：從錯誤中學習

2. 簡耀君獸醫師：獸醫細胞學

### (三) 第 82 次比較病理研討會邀請專題演講

1. 陳雅媚獸醫師：犬貓口腔病理學 (Oral pathology of dogs and cats)

2. 彭奕仁 (Yi-Jen Peng) 副教授：Hepatocellular carcinoma

## 三、舉辦學術病理切片病例討論

(一) 於第 80 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。

(二) 於第 81 次比較病理研討會共有 4 個單位提供 4 個病例供會員討論。

(三) 於第 82 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。

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

(一) 提供第 80-82 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) 完成第 80 及 82 次比較病理研討會與會獸醫師再教育學分認證。



## 中華民國比較病理學會 111 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招募，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 110 年度工作報告與經費收支狀況，研議 111 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) 病例資料處理：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申請及協助會員學分認證

# 中華民國比較病理學會 111 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. 第九屆第三次會員大會於 111 年 4 月 16 日於線上召開。

2. 第九屆理監事會議

(1) 第九屆第六次理監事會議於 111 年 4 月 16 日於線上召開。

(2) 第九屆第七次理監事會議於 111 年 8 月 20 日於線上召開。

3. 舉辦學術研討會

(1) 第 83 次比較病理研討會於 111 年 4 月 16 日線上召開。

(2) 第 84 次比較病理研討會於 111 年 8 月 20 日線上召開。

## 二、 舉辦學術演講

### (一) 第 83 次比較病理研討會邀請專題演講：

1. 彭奕仁副教授：Non-alcoholic fatty liver disease

2. 廖俊旺 教授：有關健康食品護肝動物模式病理評估

### (二) 第 84 次比較病理研討會邀請專題演講：

1. 朱珮華博士/美國臨床病理專科獸醫師：Cytologic Diagnosis of Urinary Tract Diseases in Small Animals

2. 杭仁鈺醫師：Update of 2022 WHO Classification of Renal Neoplasia

### (三) 第 85 次比較病理研討會邀請專題演講：

1. 趙載光副教授：腎臟病理

2. 麥振權助理教授：Periparturient Diseases in Dogs and Cats

## 三、 舉辦學術病理切片病例討論

(一) 於第 83 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 84 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。

(三) 於第 85 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.ivp.nchu.edu.tw/cscp/>)

(一) 提供第 83 次比較病理研討會活動花絮照片

(二) 提供第 84 次比較病理研討會活動花絮照片

(三) 提供第 85 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 83 次比較病理研討會無繼續教育認證。

(二) 第 84 次比較病理研討會無繼續教育認證。

(三) 第 85 次比較病理研討會提供獸醫師繼續教育認證。

## 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.ivp.nchu.edu.tw/cscp/>
3. Choose the slide images (e.g. 63<sup>rd</sup> 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	Ependyoblastoma	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, papillary carcinoma, metastatic	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 阜大学)
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 lymphangiomyomatosi	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部
378	53	Medullary carcinoma	Human	高雄醫學大學病理部
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	奇美醫院病理部
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	奇美醫院病理部
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	Maligant 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	Oligodendroglioma 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. 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部
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 differentiated (pT1bNO) (EARLY) (Synchronous cancer)	Human	秀傳醫療社團法人秀傳紀念醫院
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 angiolymphatic 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	Paranglioma 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 <sup>rd</sup> and 4 <sup>th</sup> 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 ( <i>Pogona vitticeps</i> )	國立中興大學獸醫病理生物學研究所
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) / Extraskelatal 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

## 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	Intracavitary aspergilloma and cavitory 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 (Lawsonia intracellularis infection)	Porcine	屏東縣家畜疾病防治所
68.	9	Liver abscess (Klebsillae pneumoniae)	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 Streptococcus 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, Buirkholderia 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	Rat	國立中興大學獸醫學院

		Trichosomoides crassicauda infestation		
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 dacryocystitis	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,	Dog	國立中興大學獸醫病理生物學研究所

		chronic progressive, urinary bladder, ureters and kidneys		
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 cheloniae</i> (basonym <i>Dermatophilus cheloniae</i> ) in a free-ranging wild Taiwanese japalure	Taiwanese japalure	台灣大學獸醫學系
584	85	<i>Salmonella</i> Enteritidis 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	Pseudorabies	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:Lymphdenitis, 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	Goat	台灣動物科技研究所

		eosinophilic intracytoplasmic inclusion bodies.		
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) virus and Salmonella typhimurium.	Swine	屏東縣家畜疾病防所
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

### 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	Intracavitary aspergilloma and cavitory 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	立眾生技有限公司

### 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 <i>Toxocara canis</i> 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 <i>Angiostrongylus cantonensis</i>	Human	台北榮民總醫院 病理檢驗部
156	19	<i>Parastrongylus cantonensis</i> infection	Formosan gem-faced civet	中興大學獸醫學院
	19	<i>Capillaria hepatica</i> , <i>Angiostrongylus cantonensis</i>	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	<i>Psoroptes cuniculi</i> 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 philippinesis	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 <i>Spironucleus (Hexamita) muris</i>	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	<i>Trichosomoides crassicauda</i> , 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 ( <i>Bordetellae trematum</i> ) with <i>Trichosomoides crassicauda</i> 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 endometrial 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	Eosinophilic 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	Parastrongyliasis (Previously called Angiostrongyliasis)	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
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## 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

黃威翔 助理教授

cscptaiwan@gmail.com

02-33663760

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 黃威翔 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：02-33663760







