Chinese Society of Comparative Pathology

中華民國比較病理學會

第 81 次比較病理學研討會

細胞學病例討論專題

(Cytology)

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 110 年 8 月 14 日(August 14, 2021)

Schedule

81th MEETING OF COMPARATIVE PATHOLOGY

中華民國比較病理學會 第 81 次比較病理學研討會

細胞學病例討論專題

時間：110 年 8 月 14 日（星期六）

形式：線上會議（google meet）

電話：02-33663760

Time (時間)	Schedule (議程)		Moderator (主持)
8:30~9:00	Registration (報到)		
9:00~9:10	Opening Ceremony (致詞) 鄭謙仁 理事長		
9:10~10:10	專題演講	主講：施洽雯 醫師 題目：從錯誤中學習	鄭謙仁 理事長
10:10~11:10	專題演講	主講：簡耀君 獸醫師 題目：獸醫細胞學	
11:10-11:20	Break (拍線上團體照)		
11:10-11:30	Case 560	Meng-Hsuan Liu (劉孟璿) [1]; Yen-Lin Chen (陳燕麟)[1] 1 Department of pathology, Cardinal Tien Hospital, School of Medicine, Fu-Jen Catholic University, New Taipei, Taiwan	黃威翔 秘書長
11:30~11:50	Case 561	I-Chi Luo (羅怡琪), DVM, MS[1]; Wen-Tien Tsao (曹文恬), DVM, MS[1]; Chia-Wei Jiang (江家瑋), DVM, MS[1] [1] HOPE Veterinary Pathology Diagnostic Center (霍普獸醫病理診斷中心)	黃威翔 秘書長
11:50~12:10	Case 562	Chia-Wen Shih (施洽雯), M.D., M.S. [1]; Hsuen-Tang Yeh (葉顯堂), M.D. [2] 1 Department of Pathology, Lotung Poh-Ai Hospital (羅東博愛醫院病理科)	黃威翔 秘書長

		2 Department of General Surgery, Lotung Poh-Ai Hospital (羅東博愛醫院一般外科)	
12:10~12:30	Case 563	Yen-Chi Chang (張言齊), DVM, MS[1,2]; Jiunn-Wang Liao (廖俊旺), DVM, Ph. D.[1,2]; Hue-Ying Chiou (邱慧英), DVM, Ph. D.[1] 1 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) 2 Animal Disease Diagnostic Center, National Chung Hsing University (國立中興大學動物疾病診斷中心)	黃威翔 秘書長
12:30~13:00	General Discussion (綜合討論) 鄭謙仁 理事長		

目　　錄

Special Lecture (專題演講)

從錯誤中學習

以個案檢討談細胞醫檢師的精進與成長

羅東博愛醫院　病理科 施洽雯

細胞病理科在病理科是很重要的一個部門，不管是在醫學中心，區域醫院或地區醫院幾乎都會有細胞學的診斷。有些醫院可能有病理住院醫師可以幫助病理主治醫師做第一線的抹片閱片，但在沒有住院醫師的醫院往往要請細胞醫檢師來做第一線的抹片閱片工作，所以對細胞醫檢師的培訓和再教育是很重要的，訓練有素且有經驗的細胞醫檢師可以協助病理主治醫師做第一線的抹片閱片工作，先找出有問題的細胞再給病理主治醫師做最後的確診，在我們醫院因為沒有病理住院醫師，所有第一線的抹片閱片工作都是要靠細胞醫檢師，所以我們對細胞醫檢師的訓練和教學非常的重視，除了晨會，雜誌研讀，網路線上教學研討，我們還特別要求每位細胞醫檢師都有一個筆記本記錄所有自己看過的抹片，並且要去追蹤最後病理切片的結果，且每個月做檢討報告。要知道細胞醫檢師的細胞診斷有沒有跟最後的病理切片吻合，如果有嚴重的不吻合例如細胞學診斷是良性而病理切片卻是惡性，或是細胞學診斷是惡性而切片病理卻是良性，這一種嚴重的不吻合會要求細胞醫檢師必須做報告，一方面訓練細胞醫檢師有查詢資料的能力，最重要的文要讓醫檢師知道自己是那裡錯了，因為只有自己知道那裡錯了下一次才不會再犯同樣的錯誤。也就是藉由錯誤的個案的檢討來加強並增長細胞醫檢師對細胞診斷的能力。人非聖賢，孰能無過，過而能改，善莫大焉。檢討錯誤不是責怪，而是要從錯誤中學習。此專題演講就是藉由四個嚴重不吻合的錯誤案例，而細胞醫檢師針對自己所犯的錯誤所做的檢討報告與學會會員們分享。

註: 具醫檢師資格加 1-4 項其中之一項資格，為細胞醫檢師得從事細胞病理診斷。

1. 曾參加衛生福利部辦理之「細胞醫檢師培訓計畫或子宮頸抹片細胞檢驗技術員培訓計畫」，並獲有結業證明。.
2. 曾在國內優良之子宮頸細胞病理診斷單位接受細胞病理學訓練達六個月（92 年以後須達一年以上)，持有證明者。
3. 曾在美、英、日、加拿大或澳洲等先進國家進修細胞病理學，領有合格執業執照或是本部認可之證書者。

具有通過 The International Academy of Cytology (IAC) 之考試證明者。

Special Lecture (專題演講)

獸醫細胞學：臨床與病理之間的橋樑

長青動物醫院 獸醫師 簡耀君

細胞學檢查是從組織內獲取剝落的細胞進行顯微鏡檢查，此為目前廣泛使用於臨床檢驗的應用科學。細胞學可以在短時間內提供臨床獸醫師診治方向，也為之後的組織病理學檢查提供額外形態學線索。相較於外科生檢在動物往往需要全身麻醉，細胞學採樣的侵犯性小，僅需良好保定或輕度鎮靜即可完成，甚至可以短時間內重複採樣，臨床上絕大多數飼主的接受度甚高。近幾年因為影像學蓬勃發展，超音波或電腦斷層導引採樣，在臨床小動物醫學也逐漸普及。

一個完整與精準的細胞學檢查，從最初的採樣、玻片製備、風乾固定、染色到最後的判讀，每一個環節緊密相扣，缺一不可。採樣方式包含細針穿刺（fine needle biopsy，又可分為抽吸式與非抽吸式）、蓋印（imprint）、刮取（scraping）、抹片（swab or smear）。每一種採樣方式的適用時機不同，不同的採樣方式可能會大幅影響樣本細胞數量，例如大部分軟組織肉瘤不易剝落細胞，因此細針穿刺時若沒搭配針筒負壓抽吸，所得到的樣本很可能細胞稀少到無法判讀，特別是分化良好之腫瘤。

在小動物臨床上最常使用的細胞學染色，改良自瑞式染色法（Romanowsky stain），其中臺灣最廣為使用的是 Diff-Quik 染色，以及 1953 年由國立臺灣大學醫學系劉禎輝教授發表的劉式染色。前者的優點是耗時短，且犬瘟熱病毒（canine distemper virus）包含體的染色效果卓越；缺點是某些細胞的細胞質顆粒染色性不顯著，例如嗜鹼性球、肥大細胞、大顆粒性淋巴球。由於肥大細胞瘤是狗十分常見的皮膚腫瘤，Diff-Quik 染色若未能染出特徵性細胞質顆粒，可能導致誤判為其他種圓形細胞瘤。

除了一般形態學判讀以外，我們可將細胞抹片進行特殊染色（又稱化學染色），協助鑑定是否有病原（例如用 PAS 染色，凸顯黴菌菌絲與孢子），或確認細胞內外基質類型（例如用剛果紅染色，搭配偏光鏡診斷類澱粉物質）。也可進行免疫細胞化學染色（immunocytochemistry），區分腫瘤細胞來源，合併流式細胞術（flow cytometry）與聚合酶鏈式反應檢查抗原受器重組（PARR），在動物淋巴瘤與白血病的診斷上，提供龐大的協助。

Case Diagnosis

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民國 110 年 8 月 14 日

（閱片網址：http://www.ivp.nchu.edu.tw/slidecenter.php?id=503）

Case No.	Presenter	Slide No.	Diagnosis
Case 560	劉孟璿	498169	Glioblastoma, human http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1939(CS21-03248-1) http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1940 (6H1-1498169)
Case 561	羅怡琪	21-771	Transmissible venereal tumor (TVT), dog **http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1910**
Case 562	施洽雯	CN19-1831	Metastatic small cell carcinoma. Right axillary lymph node, human **http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1938**
Case 563	張言齊	CS21-03248-1 CS21-03248-2 CS21-03248-3	Presumptive chronic myelomonocytic leukemia, central bearded dragon *(Pogona vitticeps)* **http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1936 (CS21-03248-1)** **http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1937 (CS21-03248-2)** **http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1935 (CS21-03248-3)**
Bonus case	提供者： 廖珮雯 *本次不報告	NTU2021-51H2-1 NTU2021-51H2-2	Oligodendroglioma, dog **http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1928 (NTU2021-51H2-1)** **http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1931 (NTU2021-51H2-2)**

Case Number: 560

Slide Number: 498169
Slide View:
http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1939 (CS21-03248-1)
http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1940 (6H1-1498169)

Meng-Hsuan Liu (劉孟璿)[1]; Yen-Lin Chen (陳燕麟)[1]
[1]Department of patholologgy, Cardinal Tien Hospital, School of Medicine, Fu-Jen Catholic University, New Taipei, Taiwan

Case history:

This 50 year-old woman with no significant past medical history suffered from headache off and on since several months ago associated with some neurologic signs. Patient went to neurology medicine OPD for help, but her symptoms were not improved. Brain CT revealed brain tumor.

Case result:

Gross findings:

Grossly, the specimen measuring 1.5 x 1.5 x 0.6 cm in size showed grey white in color and soft in consistency.

Histopathological findings:

H/E: Microscopically, the specimen has a high-grade glioma; with its nuclear atypia, cellular pleomorphism, mitotic activity and a diffuse growth pattern. A dense cellularity in fibrillary background is seen. Microvascular proliferation includes all cellular elements of blood vessels (endothelium, pericytes and fibroblasts). Areas of hemorrhage was focal; however, pseudoalisading necrosis is not prominent.

Cytology: Tissue fragments with fine fibrillar background, individual and clustered cells. Small nuclear size and elongated shape was noted. Microvascular proliferation and necrosis are not prominent but suspected.

Immunohistochemical (IHC) staining results:

- GFAP: positive
- MIB-1: 90%

Pathological diagnosis:

Glioblastoma

Differential diagnosis:

- Anaplastic Oligodendroglioma
- Anaplastic Ependymoma
- Metastatic Neoplasm

Discussion:

Glioblastoma (GBM) is one of the most aggressive and common primary malignant human brain tumors, comprising 15% of all intracranial neoplasms and approximately 45-50% of all primary malignant brain tumors. The average age-adjusted incidence rate is 3.2 per 100,000 population. Although GBMs occur almost exclusively in the brain, they can also appear in the brain stem, cerebellum, and spinal cord. Sixty-one percent of all primary gliomas occur in the four lobes of the brain: frontal (25%), temporal (20%), parietal (13%), and occipital (3%). Originally, GBMs were thought to be derived solely from glial cells; however, evidence suggests that they may arise from multiple cell types with neural stem cell–like properties. These cells are at multiple stages of differentiation from stem cell to neuron to glia, with phenotypic variations determined, in large part, by molecular alterations in signaling pathways rather than by differences in cell type of origin.

At present, GBMs are divided in primary and secondary according to the mutational status of the isocitrate dehydrogenase (IDH) genes. In addition, IDH1 and IDH2 mutations are considered crucial to define the prognosis. Although primary and secondary GBMs are histologically indistinguishable, they retain distinct genetic alterations that account for different evolution of the tumor. The high invasiveness, the propensity to disperse throughout the brain parenchyma, and the elevated vascularity make these tumors extremely recidivist, resulting in a short patient median survival even after surgical resection and chemoradiotherapy.

Microscopically, glioblastoma is typically a highly cellular glioma, usually composed of poorly differentiated, sometimes pleomorphic tumor cells with nuclear atypia and brisk mitotic activity. Prominent microvascular proliferation and/or necrosis is an essential diagnostic feature. As the outdated term ‘glioblastoma multiforme’ suggests, the histopathology of this tumor is extremely variable. Some lesions show a high degree of cellular and nuclear polymorphism with numerous multinucleated giant cells; others are highly cellular but relatively monomorphic. The astrocytic nature of the neoplasms is easily identifiable (at least focally) in some tumors, but difficult to recognize in tumors that are poorly differentiated. The regional heterogeneity of glioblastoma is remarkable, making histopathological diagnosis difficult on specimens obtained by stereotaxic needle biopsies. The diagnosis of glioblastoma is often based on the identification of the tissue pattern rather than of specific cell types. The presence of highly anaplastic glial cells, mitotic activity, and microvascular proliferation and/or necrosis is required. The distribution of these key features within the tumor is variable, but large necrotic areas usually occupy the tumor center, whereas viable tumor cells tend to accumulate in the periphery. The circumferential region of high cellularity and abnormal vessels corresponds to the contrast-enhancing ring seen radiologically and is an appropriate target for needle biopsy. Microvascular proliferation is seen throughout the lesion but is usually most marked around necrotic foci and in the peripheral zone of infiltration.

Immunohistochemically, Glioblastomas often express GFAP, but the degree of reactivity differs markedly between cases; for example, gemistocytic areas are frequently strongly positive, whereas primitive cellular components are often negative. S100 protein is also typically expressed in

glioblastomas. In poorly differentiated tumors, the expression of OLIG2 may be of diagnostic utility, being strongly positive far more commonly in astrocytomas and oligodendrogliomas than in ependymomas and non-glial tumors. The expression of cytokeratins is determined by the class of these intermediate filaments and antibodies used, some of which may indicate crossreactivity with GFAP; keratin positivity is most often detected with the keratin antibody cocktail AE1/AE3, in contrast to the lack of positivity for many other keratins. Glioblastomas with missense TP53 mutations show strong and diffuse immunohistochemical overexpression of p53, with such overexpression evident in 21-53% of cases. EGFR expression occurs in about 40-98% of glioblastomas and correlates with the presence of gene amplification.

GBM is considered an immunologically cold tumor. Several studies highlight a highly immunosuppressive tumor microenvironment that promotes recurrence and poor prognosis. Deeper insight into the tumor immune microenvironment, together with the recent discovery of a conventional lymphatic system in the central nervous system (CNS), led to new immunotherapeutic strategies. In the last two decades, experimental evidence from different groups proved the existence of cancer stem cells (CSCs), also known as tumor-initiating cells, that may play an active role in tumor development and progression. Recent findings also indicated the presence of highly infiltrative CSCs in the peritumoral region of GBM. This region appears to play a key role in tumor growing and recurrence.

Reference:

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5. Davis ME. Glioblastoma: Overview of Disease and Treatment. Clin J Oncol Nurs. 2016;20(5 Suppl):S2-S8.
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Case Number: 561

Slide Number: 21-771
Slide View: http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1910

I-Chi Luo (羅怡琪), DVM, MS[1]; Wen-Tien Tsao (曹文恬), DVM, MS[1]; Chia-Wei Jiang (江家瑋), DVM, MS[1]

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

CASE HISTORY:

Signalment: A 5-year-old, castrated male, mixed, dog

The dog was sent to a local veterinary clinic for treating the injuries caused by car hit two years ago. The owner requested there was small amount of sanguineous fluid flowing out from the prepuce intermittently in these two years. In the physical examination, multiple, erosive to ulcerative masses were found in the prepuce. Biopsy two tissues of the prepuce and send for pathological examination.

Gross Findings:

Two fixed incisional biopsied tissues were received. They showed homogeneously yellowish appearance.

CASE RESULT:

Histopathological Findings:

Microscopically, the two biopsied tissues are composed of large numbers of neoplastic cells. They grow in dense sheet, and are accompanied by varied amounts of fibrous connective tissues. The neoplastic cells are large, round, with distinct cell borders. They have abundant scant basophilic cytoplasm and a central round nucleus containing 1-2 conspicuous nucleoli. The cytoplasmic vacuoles are frequently noted. The mitosis is variable but generally high, about 3-5 per HPF. Mild anisocytosis is noted. Scatters of small numbers of mature lymphocytes are noted within the tumor growth.

Pathological Diagnosis: Transmissible venereal tumor (TVT)

Differential diagnosis:

1. Mast cell tumor
2. Lymphoma
3. Histiocytoma

Discussion:

Canine transmissible venereal tumor (CTVT) is a unique neoplasm that can be transmitted by physical contact during sexual intercourse, or less commonly, direct implantation during contact between skin and tumor masses. It is thought to be an ancient disease and has been widespread globally approximately 500 years ago. Tropical and subtropical areas have higher incidence than temperate and frigid countries. Young dogs, stray dogs, and sexually active dogs are most frequently affected by the neoplasm. Besides, not only dogs (*Canis familiaris*), but other canids, such as foxes, coyotes, and wolves, can be occasionally infected.

CTVTs most commonly occur in external genitalia, such as penis and vulva, and they can occasionally arise on the oral, nasal, or conjunctival region through direct transplantation of the neoplasm. It typically showed single to multiple fragile, irregular-shaped masses, presenting reddish and ulcerated lesions. Metastasis is rare and is only reported in puppies and immunocompromised dogs. Metastases to the inguinal lymph nodes, brain, adenohypophysis, liver, and kidneys have been reported.

CTVT has characteristic cytological features. The cytology morphology exhibited high cellularity, and is composed of large numbers of round cells. Those cells are large, with a round nucleus containing coarsely stippled chromatin. The cytoplasm often contains abundant conspicuous vacuoles. Mitoses are frequent, and bi- and multi-nucleated cells are occasionally presented. The histopathological findings also show similar histopathology features, with dense sheets of round cells, containing cytoplasmic vacuoles, and frequent mitosis and binucleated cells. The origin of neoplastic cells is not so clear, but most researchers thought it is the histiocytic origin. They are well immunoreactive for vimentin, lysozyme, and alpha-1-antitrypsin, but negative for the markers of epithelial cells, muscles, and lymphocytes.

The normal diploid number of chromosomes in the somatic cells of the dogs is generally 78, but the CTVTs neoplastic cells have 59 rather than the usual 78 chromosomes, and the karyotypic variation is consistent between CTVTs of different animals. Also, the neoplastic cells are aneuploid and have a unique long interspersed nuclear element (LINE-1) that may be useful to confirm TVT origin in cases involving tumors in unusual sites.

The CTVTs mainly occur during sexual mating. The initial transmission of the tumor is due to the transplantation when the intact host lacks the expression of major histocompatibility complex class I and II (MHC I& II), allowing the TVT cells to grow and escape the host immune system. CTVTs have three phases of growth, including progressive, stable, and regressive phases. The progressive phase generally lasts for a few weeks, characterized by rapid growth of tumor sizes. After several weeks to months, the tumor turns stable phase. The growth rates of tumors show marked slowly in the stable phase. During the regressive phase, the increasing numbers of lymphocytes and secretion of IL-5 can be noted to subside and kill the tumor cells.

In general, CTVTs can spontaneously regress, but individual situations and responses vary in each dog. The main treatment for CTVTs is surgical excision. Chemotherapy, radiotherapy, immunotherapy, or a combination thereof are also optional treatments.

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Case Number: 562

Slide Number: CN19-1831
Slide View: http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1938

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2. Department of General Surgery, Lotung Poh-Ai Hospital (羅東博愛醫院一般外科)

CASE HISTORY:

Signalment: 63-year-old woman. .

Clinical History:

A 63-year-old woman presented to our OPD of general surgery with the chief complaint of a palpable tumor in her right breast. Physical examination revealed right breast tumor in OUQ and measuring about 3.0 cm in diameter with firm consistency. Mammography showed a right breast tumor measuring 3.6 x 3.1 x 2.9 cm. Sonography revealed a right breast tumor measuring 2.3 x 2.0 x 1.9 cm, and also showed lymphadenopathy in right axilla. Under the impression of right breast cancer with right axillary lymph node metastasis, fine needle aspiration cytology of right axillary lymph node was performed. The smears were sent to the Department of Pathology for cytologic diagnosis. Core needle biopsy of right breast tumor was also performed. The tissue fragments were also sent to the Department of Pathology for pathologic diagnosis.

Clinical Pathology:

BUN: 17 mg/dL (6-20 mg/dL), Creatinine: 0.8 mg/dL (0.6-1.1 mg/dL), Glucose: 148 mg/dL (70-100 mg/dL), Na: 143 mmol/L (135-145 mmol/L), K: 3.9 mmol/L (3.5-5.1 mmol/L), Cl: 106.0 mmol/L (96-110 mmol/L), Ca: 8.9 mg/dL (8.6-10.2 mg/dL), AST (GOT): 18 U/L (5-40 U/L), ALT (GPT): 22 U/L (5-40 U/L), LDH: 168 U/L (135-225 U/L) RBC: $5.1x10^6$/uL ($4.2-5.4x10^6$/uL), Hb: 14.7 gm/dL (12.0-16.0 gm/dL), Hct: 44.8 % (37-47%), Plt: 24.7 $x10^4$/dL (15-40 $x10^4$/dL), WBC: 6.2 $x10^3$/uL ($4.5x10^3$-$11.0x10^3$/uL), Lymphocyte: 35.4% (20.0-45.0%), Neutrophil: 55.5% (45.0-75.0%), Monocyte: 8.0% (0.0-9.0%), Eosinophil: 0.7% (1.0-3.0%), Basophil: 0.4% (0.0-1.0%). CEA: 0.81 ng/mL (<5.0 ng/mL), CA15-3 : 4.97 U/mL (<25.00 U/mL).

CASE RESULT:

Cytologic Findings:

Cytological examination revealed lymphocytes, RBCs, and necrotic debris mixed with neoplastic cells with mild irregular size and shape, mild enlarged and hyperchromatic nuclei, high

N/C ratio and indistinct nucleoli. The neoplastic cells are 2-3 times of mature lymphocytes. No specific differentiation was noted.

Differential diagnosis:

1. Metastatic ductal carcinoma.
2. Metastatic lobular carcinoma.
3. Metastatic small cell carcinoma.
4. Lymphoma.

Diagnosis: Metastatic small cell carcinoma. Right axillary lymph node.

Comments:

Small cell carcinoma (SmCC) can occur in a variety of sites throughout the body, especially in the lungs (95% of all SmCC), the gastrointestinal tract and the pancreas. Primary breast small cell carcinoma (BSmCC) is a rare entity, comprising 0.3 to 0.5% of all breast cancers. The first case was described by Wade et al in 1983 and only about 100 cases have been reported until now. Although BSmCC was first described more than 35 years ago, it was not until 2003 that the World Health Organization (WHO) defined BSmCC as a separate subtype of breast cancer. There were three predominant cytomorphological patterns observed including : 1. Small-cell clusters with indian-file and prominent nuclear molding. 2. Large-cell clusters mimicking non-small-cell carcinoma. 3. Single-cell pattern mimicking lymphoma. Significant tumor necrosis, tumor cell cannibalism and crushing artifact can be seen. The diagnosis of BSmCC should fulfill three criteria, according to the WHO definition of the disease. First, immunohistochemistry should identify neuroendocrine features in at least 50% of the tumor cells. It should be noted that focal neuroendocrine differentiation within breast tumors is common and has no prognostic significance. The second criterion for the diagnosis of BSmCC is the exclusion of extra-mammary primary tumors, mainly in the lungs and gastrointestinal tract, usually with the help of imaging techniques other than breast imaging such as a chest and abdomen computed tomography (CT) scanning or positron emission tomography (PET-CT) scanning. The third criterion is the presence of an in situ component on breast pathology. Certain architectural patterns such as papillary, nesting, or mixed should also raise suspicion about the possibility of BSmCC.

Chromogranin and synaptophysin are the immunostains most used for BSmCC diagnosis; CD56 and neuron-specific enolase (NSE) lack specificity for BSmCC. Estrogen receptors (ER) and progesterone receptors (PR) are not common in BSmCC with 35% and 50% respectively. BSmCC tend to test negative for HER2 receptors.

Treatment includes different options (surgery, chemotherapy and radiotherapy), which depend on the clinical stage and the presence or absence of distant metastases. BSmCC is usually treated with modified radical mastectomy and axillary lymph node dissection, often followed by radiation at the surgery sites and peripheral lymphatics. Metastasis might be anticipated in around 20% of cases,

but, BSmCCs have shown to be highly responsive to chemotherapy, and to radiation therapy. The application of small cell lung cancer (SCLC) treatment to BSmCC appears to carry the best survival. The prognosis of BSmCC largely depends on the initial stage. BSmCC are also staged according to the Veterans Administration Lung Study Group (VALSG) unique staging system for SCLC, and are categorized as either limited disease or extensive disease. Prior case reports of BSmCC suggest that a breast primary may carry a higher survival rate than other primary sites SmCC. BSmCCs have a more aggressive evolution in comparison with invasive ductal carcinoma, more prone to local recurrence and distant metastasis. Ozkan Kanat et al reported seven cases of small cell carcinoma of breast and review the literatures. Their report showed that fifty-three cases of primary small cell carcinoma of the breast were identified totally. Axillary node metastasis was present in 61.7%. Only one patient had distant metastases at presentation. The presence of hormone receptors was reported in 24.5% of the tumors. Modified radical mastectomy was the most common surgical procedure and was performed in 50.9% of the patients. Adjuvant radiotherapy was administered to 39.6% of the patients, and 69.8% underwent chemotherapy. 13% of patients received adjuvant tamoxifen therapy. The mean follow-up was 20.75 months (range, 3–60), and 10 of 53 cases (18.9%) died of metastatic disease.

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Case Number: 563

Slide Number: CS21-03248
Slide View:
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http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1937 (CS21-03248-2)
http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1935 (CS21-03248-3)

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CASE HISTORY

Signalment: A central bearded dragon *(Pogona vitticeps*), adult, spayed female.

Clinical History:

A 440g, 8-year-old female bearded dragon *(Pogona vitticeps*) was presented for examination because of lethargy, bilateral swollen conjunctiva with increasing lacrimal secretion, and continuing labor breathing. The patient was spayed 5 years ago due to egg yolk peritonitis. The patient remained clinically healthy after the surgery until September 2020. The animal had been housed in a 70 × 50 × 40 cm plastic container enclosure with a heat plate, a ceramic heater and a light source for basking. The patient was offered a vegetable diet supplemented with Turkestan cockroaches or Dubia cockroaches every alternative days. At initial presentation, physiological examination revealed mild dehydration and periorbital edema. Radiography revealed increased pulmonary opacity, especially area of trachea bifurcation. A tentative diagnosis of mild pneumonia was made. Antibiotics and expectorants were administrated for a week but the signs did not resolved. At the follow up visit, ultrasonography, hematological examination and serum biochemistry were performed.

Clinical pathological findings

A peripheral blood sample was collected from the ventral tail vein for spun hematocrit (HCT), blood smear preparation, and serum biochemistry after one-week therapy. The HCT revealed baseline hematocrit (19%) and extremely thickened buffy coat (19%). Under Diff-Quik stain smear, the majority leukocytes revealed mild to moderate anisocytosis and moderate nucleus-to-cytoplasmic ratio. The nucleus were round to oval with coarsely granular chromatin. The cells could be sort into 3 types: 1) round to oval nucleus, pale blue cytoplasm without granule 2) oval to reniform nucleus,

sky blue cytoplasm with numerous purple granules 3) oval to reniform nucleus, pale pink cytoplasm with crimson granules 4) oval to reniform nucleus, sky blue cytoplasm without granule.

All items of the biochemical panel were lied within reference range.

Treatment

Since the diagnosis of leukemia was confirmed, the treatment for leukemina was initiated with prednisolone 0.3 mg/kg BW q 48 h PO and chlorambucil 0.3 mg/kg BW PO compounded to 1 mg/mL using vegetable oil on October 12. The dosage was derived from a metabolic scaling of veterinary chemotherapy and intended for q 7 day dosing. From November 4 to December 10, spun HCT revealed a marked and continuous reduction in thickness of buffy coat layer. Under blood smears in the same period, the constitution of leukocyte had gradually turn into mature lymphocyte and granulocyte populations. On December 12, the treatment was suspended according to the stable hematological profile, spirit and appetite of the patient.

Follow-up

Blood sampling from the ventral coccygeal vein performed at approximate 2-week intervals for repeat hematological examination and biochemistry as previously described. The patient continued to show good appetite and activity through early February 2021. In late February, the patient started with signs similar to previous condition. On February 23, immature myeloid cells was observed in routine blood smear examination. Adminstartion of chlorambucil and prednisolone was restarted for 3 weeks, but it was seemed irresponsible according to the gradually increasing myeloid cells observed in blood smear. On March 23, the HCT revealed 7% hematocrit and 48% buffy coat. Blood smear showed similar tumor population. The result of serum biochemistry revealed significant elevation of uric acid, magnesium and aspartate transaminase. Since the ineffectiveness of previous chemotherapy regimen, chlorambucil has been replaced with cyclophosphamide 0.98 mg/m^2 PO. Normal saline with vitamin complex 25ml/kg BW sid SC was given as noninvasive supporting fluid therapy. The patient was found dead five days later.

Gross Findings:

The patient was weighed 416 g (BCS = 2/5) and was severe dehydrated. At necropsy, there was large amount of bloody, hazy viscous fluid in somatic cavity. Multifocally, there were white foci ranging from 0.5 to 3 mm in diameter in the parenchyma and/or on the serosal surface of lung, spleen, kidney, fat pad and intestine. The affected organs were mottled and firm. The liver was dark green to black and shrunken. Multiple firm nodules with gelatinous fluid on the surface were noted in ribs and thoracic vertebrates. Cross section of thoracic vertebrate revealed that the cortices were thicken. Longitudinal section of femur revealed pale yellow bone marrow.

CASE RESULT

Cytological Findings:

Diff-Quik stain and Giemsa stain: The touch imprints of kidney, liver, and spleen revealed numerous myeloid cells which was same as leukemic myeloid cells in blood smear.

Histopathologic Findings:

Liver

Diffusely infiltrating about ~90% areas of hepatic parenchyma, and diffusely within the sinusoids and centrilobular veins there is a neoplastic population composed of round cells with distinct cell borders, ranging from 15 to 20 μm in size. Approximately 30-40% of the neoplastic cells have a moderate amount of cytoplasm with eosinophilic cytoplasmic granules, while the others' cytoplasm are light basophilic and smudged. Nuclei are irregularly round to oval, 8 to 10 μm in diameter, with clumped chromatin. There are up to 3 mitotic figures per HPF. The remained hepatocytes are characterized by severe cytoplasmic vacuolar degeneration. The density of melanomacrophage center is increased.

Bone marrow

The same neoplastic population described in the liver effaces bone marrow and there is an absence of precursors of other cell lineage. The thicken foci reveal clusters of hyperplastic chondrocytes surrounded by chondromucinous matrix and unmineralized osteoid. The unevenly-thicken cortices compose of irregularly-distributed lamellar bone. All vessels are filled with neoplastic cells.

Spleen

The same neoplastic population fills nearly entire splenic parenchyma.

Kidney

The same neoplastic population fills all interstitial vessels and glomeruli. Multifocally, subcapsular space is infiltrated with tumor cells, forming nodular lesions.

Fat pads

The same neoplastic population efface nearly all adipose tissue. All vessels are dilated and filled with neoplastic cells.

Lungs

The same neoplastic population fills all interstitial vessels and capillaries.

Esophagus

The same neoplastic population extensively and diffusely infiltrate the spaces between layers submucosa, inner circular muscularis, longitudinal muscularis and serosa. All vessels are filled with neoplastic cells.

Gastrointestinal tract

The neoplastic cells diffusely infiltrate the mucosa and submucosa. The mucosal epithelium is multifocally necrotic.

Thyroid gland

The same neoplastic population fills all interstitial vessels and penetrate into subcapsular space.

Adrenal gland

The same neoplastic population efface nearly 95% of the adrenal parenchyma and invade the surrounding nerve fibers.

Heart

The same neoplastic population diffusely infiltrate the subendocardial and subepicardial space.

Eyes

The choroid are extensively and diffusely infiltrated with the neoplastic cells. The retinal pigment epithelium is diffusely hypertrophic (tombstoning appearance).

Hindlimb skeletal muscle

The myocytes are either characterized by sarcoplasmic swelling with vacuolation or hypereosinophilic and hyalinized, loss of cross striations, fragmentation of myofibrils. The contraction bands are prominent.

Morphological diagnosis:

- Myeloid leukemia, with chondrodysplasia and bone resorption, ribs, femur and thoracic vertebrates
- Myeloid leukemia, liver, spleen, kidneys, fat pads, lungs, esophagus, gastrointestinal tract, thyroid glands, adrenal glands, heart and eyes
- Zenker's necrosis, diffuse, severe, with contraction band necrosis, skeletal muscle, hindlimb

Laboratory examination

1. Cytochemistry
   (1) Peroxidase stain: Most tumor cells stain dark blue to black positive signal in cytoplasm but the intensities are varied. The cells without granule show intensive signal while the cells with either purple or crimson granules showed relatively weak signal.
   (2) Luna stain: About 20-30% tumor cells showed scarlet, granular, moderate to weak signal in cytoplasm.
   (3) Toludine blue: About 30-40% tumor cells showed strong metachromatic granules in cytoplasm.
   (4) Alcian blue: About 20-30% tumor cells showed light blue, granular, moderate to weak signal in cytoplasm.
   (5) Periodic Acid-Schiff stain: Most tumor cells showed moderate signal but the color varied from pink to purple.

2. Immunohistochemistry (IHC)

Represent tissue slides were submitted for IHC stain for CD45, Myeloperoxidase and c-KIT (CD117). Partial (~30%) tumor cells revealed positive immunoreactivity against c-KIT. The whole slides were negative for CD45 and myeloperoxidase.

Differential Diagnosis:

1. Chronic myelomonocytic leukemia
2. Chronic myeloid leukemia
3. Myelodysplastic syndrome
4. Acute myeloid leukemia

Final diagnosis:

Presumptive chronic myelomonocytic leukemia in a central bearded dragon *(Pogona vitticeps*)

Discussion:

In this case, the diagnosis of leukemia is straightforward according to the clinical presentation, clinical pathological examination and postmortem examination results. Differential diagnoses include myeloid leukemia, lymphoid leukemia, and less likely leukemia of other hematopoietic cells origin. Subsequently, the morphology under blood smears, tissue imprints and immunohistological properties are consistent with a diagnosis of myeloid leukemia.

Leukemia is defined as monoclonal or multiclonal cancers that originate in hematopoietic tissue from lymphocytic, granulocytic, monocytic, erythrocytic, and megakaryocytic or mast cell precursors. In veterinary medicine, the diagnosis of myeloid leukemia can categorize the neoplasm as acute myeloid leukemia (AML), myeloproliferative neoplasm (MPN, previously chronic leukemia), or myelodysplastic syndrome (MDS). Myelodysplastic/myeloproliferative neoplasms (MDS/MPN) is a separate category of myeloid neoplasms recognized in people but not recognized in animals. Different types of myeloid leukemia are extremely heterogeneous in clinical presentation, effect on bone marrow, tumor cell morphology and response to chemotherapy. Animals with AML are often acutely ill with bleeding tendency from thrombocytopenia, or fever due to infection secondary to neutropenia. MPN and MDS have a more insidious onset with gradual weight loss and reduced activity. Prognosis of MDS/MPN is poor, with a median overall survival of 2-3 years and have a risk of transformation to acute myeloid leukemia. In reptiles, neoplasia is rarely but becoming more frequently diagnosed and characterized in reptiles. Although the hematopoietic system is likely the most commonly affected system for reptilian neoplasia, myeloid leukemia are reported less commonly than lymphoid leukemia in reptile species including snakes, chelonians and saurian. This may be a result of longer life span and better health care in captive reptiles than wild population. The patient showed leukemia-associated signs at around 8 years old, which is senior in this species.

In mammals, clinical presentation of MPN consists of nonspecific illness with lethargy, anorexia, vomiting, mildly enlarged lymph nodes, intermittent diarrhea or vomiting, and weight loss. In human medicine, clinical signs of MDS/MPN are similar to those observed in MPN. In reptile species, all reported cases showed nonspecific signs including lethargy, anorexia and weight loss. Bone lysis was observed in one bearded dragon case of monocytic leukemia. The hematological profile often revealed anemia and marked leukocytosis. In our case, the clinical signs were similar to those

observed in mammal and reptile cases. Indeed, labor breathing, anorexia and lethargy are often observed in lizards in poor condition regardless the etiology. Abnormalities in auscultation and radiography in this case are also common finding in lizards with bacterial or viral pneumonia. The increased intensity may associated with the accumulation of tumor cells within the vessels, which is prominent lesion at necropsy.

Cases with overt leukemia characterized by a large number of abnormal cells in blood or bone marrow are straightforward to diagnose, but others require data derived from sequential blood counts, review of blood and bone marrow films, histopathology of bone marrow, and/or other hemolymphatic tissue, and immunohistochemistry and/or flow cytometry to establish the diagnosis. Immunophenotyping of neoplastic cells with antibodies to specific antigens, and analysis of neoplastic cells for mutations and cytogenetic changes, are utilized to subcategorize myeloid neoplasms in people. In veterinary medicine, immunohistochemistry and immunocytochemistry are relatively common, however Antibodies that identify myeloid cells of animals and react in FFPE tissue are limited. Flow cytometry is rarely attempt due to the limited availability of equipment and proper antibodies.

Because of the novelty of reptilian oncology, much smaller population base than other species, lower accessibility of appropriate samples for antemortem and postmortem examination, myeloid neoplasms are probably underdiagnosed. Even though presumptive diagnosis of leukemia is straightforward in reptile as those in mammals, precisely categorizing the leukemic cells population is challenging in reptilian cases, especially in acute leukemia cases that cells are indistinguishable with routine cytology or histology method. In case report of reptilian leukemia species, neither normal leukocytes nor leukemic tumor cells could be detected by most antibodies, such as CD172a, CD14, CD4, CD8, CD21. Identification of T lymphocytes through CD3 markers typically is accurate in reptilian species; however, B-cell markers, including CD79a, are not as reliable. Hence, histochemistry and cytochemistry are used to identify tumor cells, particularly in myeloid neoplasm cases. Peroxidase stain are used for indicate myeloid cells, heterophils and eosinophils in bearded dragon. Luna stain is used to identify eosinophils as in mammalian. Periodic acid Schiff, toluidine blue and alcian blue stains can react with cytoplasmic granules of mast cells and basophils which are morphologically similar by light and transmission electron microscopy in reptiles. In our case, tumor cells in blood smear composed of granulocyte with basophil and eosinophil differentiation, monocyte and relative rarely myeloblast. Antibodies with board antigenic spectrum such as CD45 and myeloperoxidase were failed to react with reptile cells. Partial positive signal in c-KIT demonstrated the tumor population include the basophil lineage. Cytochemistry including peroxidase, luna, PAS, alcian blue, toluidine blue all revealed positive signals which indicating possible differentiation of eosinophil and basophil.

Since cytopenia was not observed and myeloid blast cells <20% in blood smear, myelodysplastic syndrome and acute myeloid leukemia were ruled out. The hematologic features of MPN in veterinary medicine are defined as leukocytosis of mature cells and hypercellular bone marrow with <5% myeloblast. The hallmark of hematologic features in myelomonocytic leukemia (CMML), a category

of MDS/MPN, is monocytosis and monocytes accounting for 10% of the WBC count. In our case, we cannot exclude either the possibility of chronic myeloid leukemia or CMML, since quantification of the percentage of monocyte (i.e. IHC of lysozyme) and genetic analysis were not performed. Morphologically, the present of monocytic lineage are obvious under blood smear and tissue imprint, therefore the diagnosis of presumptive CMML is made.

Genetic and cytogenetic analysis of cancer in animals is in its infancy. Thus, rather than a diagnostic tools, genetic analysis largely remains a novel technique in academic research. The molecular lesions in most MPN of people involve acquired mutations in tyrosine kinases (TK) that result in prolonged phosphorylation of signal-transducing molecules important for proliferation and survival of differentiated hematopoietic cells. However, most genetic lesions associated with MPN in animals remain to be elucidated. The genetic analysis was not attempted in our case, since the number of leukemia cases in reptile are too small to evaluate.

In mammals, splenomegaly is usually prominent and hepatomegaly may be present in MPN. Enlargement of spleen and lymph nodes due to leukemic infiltrates, and hepatic sinusoids may contain aggregated leukemic cells. If carried out, the histopathologic examination revealed infiltration of tumor cells in multiple organs as kidney, liver, spleen and bone marrow. Necropsy and histopathological examination are seldom performed in reptilian cases. Gross lesion in previous reports include paleness of liver, hepatomegaly and splenomegaly. Histopathological finding are similar to those in mammals. In our case, all of examined organs were remained normal size, but became mottled and firm. In addition, multiple whitish nodules similar to the previous report were observed.

MPN is relatively indolent neoplasm in veterinary medicine. the prognosis does not appear to be as good as that for dogs with chronic lymphoid leukemia. As the disease progresses myelophthisis develops, cytopenia worsens, and eventually blast transformation occurs (blast crisis), resulting in clinical deterioration. However, intensive chemotherapy protocols has yielded prolonged remission in dogs, suggesting outcomes may not be uniformly incurable. Therapy for myeloid neoplasm is still in the experimental stages in reptile species. In most case reports, chemotherapy was not attempted due to management difficulty and poor prognosis. In a case report of monocytic leukemia in a bearded dragon, intravenous chemotherapy with cytosine arabinoside was performed but the patient died within the therapeutic period. In our case, chlorambucil and predinisolone treatment was performed according to the veterinarian’s suggestion, and owner’s opinion of noninvasive treatment protocols. To our knowledge, this is the first attempt of the treatment protocols in saurian species case. Surprisingly, nearly full remission was observed in early-to-mid stage of treatment and the patient remain clinically healthy for longer than 3 months. Although the recurrence in late stage was untreatable, we believe that the therapy used in this case is promising for reptilian cases suffering with similar situation. Blast crisis had not been observed in any hematological examination even though the continuous increase of myelocytes in late stage.

In conclusion, we provide the clinical and pathological data which is sufficient to make the diagnosis of myeloid leukemia in the bearded dragon. Nevertheless, the exact composition of tumor

cells are still undetermined. In addition, therapeutic regimen successfully, though temporally, suppressed the progression of leukemia. To our knowledge, this is the first temporally successful treatment of myeloid leukemia in a saurian species. Further studies on developing reliable diagnostic procedure, the efficacy of therapy, verifying the relationship between prognosis and cell type, and possible genetic mutation are needed to elucidate the nature of leukemia of reptiles.

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Bonus case

Slide Number: NTU2021-51H2
Slide View:
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http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=1931 (NTU2021-51H2-2)

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CASE HISTORY:

Signalment: 8-year-old, female spayed French bulldog

The patient had decreased activity since December 2020. The patient had showed mentation change, drooling, excessive panting and urine incontinence since January 2021 and soon developed into generalized tonic-clonic seizure and Lt. head turn. The clinical sign had slighted improved after Mannitol was given. MRI showed a right forebrain lesion with strong contrast ring enhancement under T1, and no infectious agent or leukogram was noticed in CSF tapping. The patient was euthanized due to rapidly deteriorated neural signs.

CASE RESULT:

Necropsy: gross findings

The viscosity of cerebrospinal fluid was mildly increased. A wound caused by surgical biopsy was noticed on the right frontal lobe. There was a soft grey to pink irregular mass noticed at the skull base of right frontal lobe. The mass
extended forward to bilateral olfactory lobes, and the soft tissues around the ethmoid bone became mildly pink to red. On the cross section after fixation, the mass was gelatinous and homogeneously beige to grey with multiple dark red regions without good demarcation. Mild to moderate transtentorial brain herniation was suspected.

Cytological findings:

The smear specimens show uniform sheet of neoplastic cells. The background is pale basophilic, finely granular, and mucoid metachromatic in some regions. Occasionally, thin capillary network could be seen. The neoplastic cells, which are surrounded by eosinophilic fibrillar mesh-like stroma, are round to polygonal with indistinctly bordered pale basophilic granular cytoplasm, and no

perinuclear halo is observed. The nuclei are round with stippled chromatin, and sometimes small nucleoli are noticed. Mild to moderate cellular pleomorphism is observed.

Histopathological findings:

A non-encapsulated, poorly demarcated and infiltrative neoplastic growth arise in the cerebral parenchyma of the right frontal lobe, expanding cranially to the bilateral olfactory lobes and laterally to gyral surface. It effaces the cerebral gray and white matter, internal capsule and caudate nucleus and causes severe mass effect, featured by the right-to-left compression and the transtentorial brain herniation. The leptomeninges are multifocally invaded by the neoplasm at the regions of the right frontal lobe and the olfactory lobe. Near the inner ethmoid bone, there are mild fibrosis, increased numbers of fibroblasts and moderate gitter cells.

The neoplastic cells are arranged in board sheets, separated by thin stroma, and numerous florid and chicken-wire like proliferative capillaries are present within and around the neoplasm. Notably, these capillaries display overall atypical appearance, featured by the prominent hypertrophy of endothelial cells. Neoplastic cells have variably distinct cell borders, a scant to moderate amount of eosinophilic, finely-granular to clear cytoplasm, a prominent perinuclear clear zone (perinuclear halo), and a round, hyperchromatic (but some with finely stippled chromatin and 1-2 indistinct nucleoli) centrally-located nucleus. Moderate anisocytosis and mild to moderate anisokaryosis are noticed, and the mitotic count is about 19 per 10 HPF. At the periphery of the cerebral white matter, the neuroparenchyma shows marked spongy state, suggestive of severe edema (cytotoxic, vascular and interstitial edema) and mild demyelination. Also, there are moderate infiltrates of gemistocytes, suggestive of astrogliosis. In the third ventricle at the level of caudal thalamus, there are aggregates of few neoplastic cells near the choroid plexus. Multifocally, moderate to severe intra- tumoral necrosis and hemorrhage are seen. There are also multifocally mild hemorrhage and mild to moderate perivascular edema at the remaining neuroparenchyma of forebrain and brainstem.

Pathological Diagnosis:

1. Oligodendroglioma, high grade (grade III), focal, with metastasis to olfactory lobes, and with severe intra-tumoral necrosis, hemorrhage and angiogenesis, spongy state, peripheral astrogliosis, right forebrain
2. Hemorrhage, multifocal, minimal, with mild to moderate perivascular edema, forebrain and brainstem

Differential diagnosis:

1. Mixed (undefined) glioma

Immunohistochemistry:

Oligo-2:

About 80%-90% of neoplastic cells reveal strong nuclear and weak intracytoplasmic positive signals against oligo-2 immunohistochemistry.

Glial fibrillary acidic protein (GFAP):

The gemistocytes are highlighted by the GFAP immunohistochemistry with the feature of strong intracytoplasmic positive signals. The neoplastic cells are negative for GFAP.

Discussion:

Oligodendroglioma (ODG) is a type of glioma which originates from the oligodendrocytes, and it accounts for about 15% of primary CNS tumors in dogs. ODG has a higher incidence rate than all other gliomas, and brachycephalic breeds have an even greater incidence than other breeds. The most common location is cranial forebrain (frontal, temporal, and piriform lobes). In the present case, oligodendroglioma is diagnosed based on the presence of characterized prominent perinuclear halos (fried egg pattern) of the neoplastic cells and severely proliferative capillaries under histopathological examination. This ODG is classified as high grade since it shows severe intratumoral necrosis as well as a relatively high mitotic count (>6 per 10 HPF) and moderate cellular pleomorphism in the examined sections. Mixed (undefined) glioma was ruled out by immunohistochemistry since about 80-90% of the neoplastic cells had shown strong nuclear immunoreactivity against olig-2 and negative against GFAP. The severe astrogliosis at the periphery of the neoplasm may be related to the prolonged progression of the ODG, loss of neuroparenchyma, and the consequent repairing process.

It is interesting to find that the strong contrast ring enhancement under T1 MRI may be correlated to the florid capillary proliferation at the periphery of the tumor. Further, under T2 MRI we could noticed a wider margin of hyperintensity regions, it may be correlated to the peritumoral edema under histopathological examination, which was considered to be an indicator of high grade ODG in human medicine while rare reported in canine's study.

Under impression cytology, classic features of ODGs were present, including granular background and presence of branching capillary. The histopathologically classic "perinuclear halo" feature, which is caused by artifacts during tissue process for histopathology, are absent under cytology. Further, anaplastic oligodendroglioma may share similar cytologic features with anaplastic astrocytoma, glioblastomas or metastatic carcinoma/ melanoma. As a result, all of the intra-axial tumors with round nuclei should be listed in differential diagnosis if only cytological morphology is available. The definite diagnosis should be combined with MRI imaging, immunocytochemistry histopathology, and immunohistochemistry.

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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、　其他有關比較病埋學術發展之事項。

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 109 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. 中華民國比較病理學會第九屆第一次會員大會於 109 年 7 月 11 日於國立臺灣大學獸醫專業學院召開。

2. 第八屆理監事會議

(1) 第八屆第十次理監事會議於 109 年 7 月 11 日於國立臺灣大學獸醫專業學院召開。

3. 第九屆理監事會議

(1) 第九屆第一次理監事會議於 109 年 7 月 11 日於國立臺灣大學獸醫專業學院召開。

(2) 第九屆第二次理監事會議於 109 年 11 月 28 日於國立臺灣大學獸醫專業學院召開。

4. 舉辦學術研討會

(1)第 78 次比較病理研討會於 109 年 7 月 11 日國立臺灣大學獸醫專業學院召開。

(2)第 79 次比較病理研討會於 109 年 11 月 28 日國立臺灣大學獸醫專業學院召開。

二、 舉辦學術演講

(一) 第 78 次比較病理研討會邀請專題演講：振興醫院解剖病理科蕭正祥主任，演講題目：SARS 與新冠肺炎的組織病理學的分析與比較

(二) 第 79 次比較病理研討會邀請專題演講：臺灣大學醫學院鄭永銘教授，演講題目：神經內分泌腫瘤（Neuroendocrine neoplasms）

三、 舉辦學術病理切片病例討論

(一) 於第 78 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 79 次比較病理研討會共有 7 個單位提供 7 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 78 次比較病理研討會活動花絮照片

(二) 提供第 79 屆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 78 次比較病理研討會與會獸醫師再教育學分認證。

(二) 完成第 79 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 110 年度工作計劃

一、 會務

(一) 徵求會員

二、 持續進行學會推廣及會員召募，擴大會員陣容，

(一) 整理會藉與清查會費

1. 更新整理會藉資料，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 109 年度工作報告與經費收支狀況，研議 110 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

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. 63rd CSCP)

4. Pick any case you'd like to read (e.g. case 435-440)

比較病理研討會病例分類一覽表

中華民國比較病理學會

第一次至第八十次比較病理學研討會病例分類一覽表

腫瘤

病例編號	會議場次	診　　斷	動物別	提　供　單　位
1.	1	Myxoma	Dog	美國紐約動物醫學中心
2.	1	Chordoma	Ferret	美國紐約動物醫學中心
3.	1	Ependymoblastoma	Human	長庚紀念醫院
8.	2	Synovial sarcoma	Pigeon	美國紐約動物醫學中心
18.	3	Malignant lymphoma	Human	長庚紀念醫院
19.	3	Malignant lymphoma	Wistar rat	國家實驗動物繁殖及研究中心
24.	3	Metastatic thyroid carcinoma	Human	省立新竹醫院
25.	3	Chordoma	Human	新光吳火獅紀念醫院
34.	4	Interstitial cell tumor	Dog	中興大學獸醫學系
35.	4	Carcinoid tumor	Human	長庚紀念醫院
36.	4	Hepatic carcinoid	Siamese cat	美國紐約動物醫學中心
38.	6	Pheochromocytoma	Ferret	美國紐約動物醫學中心
39.	6	Extra adrenal pheochromocytoma	Human	新光吳火獅紀念醫院
40.	6	Mammary gland fibroadenoma	Rat	國家實驗動物繁殖及研究中心
41.	6	Fibroadenoma	Human	省立豐原醫院
42.	6	Canine benign mixed type mammary gland tumor	Pointer bitch	中興大學獸醫學系
43.	6	Phyllodes tumor	Human	台中榮民總醫院
44.	6	Canine oral papilloma	Dog	台灣大學獸醫學系
45.	6	Squamous cell papilloma	Human	中國醫藥學院
47.	7	1. Lung: metastatic carcinoma associated with cryptococcal infection. 2. Liver: metastatic carcinoma. 3. Adrenal gland, right: carcinoma (primary)	Human	三軍總醫院
56.	8	Gastrointestinal stromal tumor	Human	台中榮民總醫院
59.	8	Colonic adenocarcinoma	Dog	美國紐約動物醫學中心

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

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

147	18	Papillary Mesothelioma of pericardium	Leopard	屏東科大學獸醫學系
148	18	Cystic ameloblastoma	Human	台北醫學院
149	18	Giant cell tumor of bone	Canine	中興大學獸醫學院
150	18	Desmoplastic small round cell tumor (DSRCT)	Human	華濟醫院
152	18	Hepatocellular carcinoma	Human	羅東聖母醫院
158	20	Hemangiopericytoma	Human	羅東聖母醫院
160	20	Cardiac fibroma	Human	高雄醫學大學病理學科
166	21	Nephroblastoma	Rabbit	紐約動物醫學中心
168	21	Nephroblastoma	Pig	台灣動物科技研究所
169	21	Nephroblastoma with rhabdomyoblastic differentiation	Human	高雄醫學大學病理科
172	21	Spindle cell sarcoma	Human	羅東聖母醫院
174	21	Juxtaglomerular cell tumor	Human	新光醫院病理檢驗科
190	27	Angiosarcoma	Human	高雄醫學大學病理學科
192	27	Cardiac myxoma	Human	彰化基督教醫院病理科
194	27	Kasabach-Merrit syndrome	Human	慈濟醫院病理科
195	27	Metastatic hepatocellular carcinoma, right atrium	Human	新光醫院病理科
197	27	Papillary fibroelastoma of aortic valve	Human	新光醫院病理科
198	27	Extraplacental chorioangioma	Human	耕莘醫院病理科
208	30	Granulocytic sarcoma (Chloroma) of uterine cervix	Human	高雄醫學大學病理學科
210	30	Primary non-Hodgkin's lymphoma of bone, diffuse large B cell, right humerus	Human	彰化基督教醫院病理科
213	30	Lymphoma, multi-centric type	Dog	中興大學獸醫系
214	30	CD30 (Ki-1)-postitive 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	Faline	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 4. cyst and atherosclerosis, chronic, testis	Goose	國立中興大學獸醫病理生物學研究所
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 (Astrochelys radiata)	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	Human	羅東博愛醫院病理科

		carcinoma		
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	Paraganglioma of urinary bladder	Human	花蓮慈濟大學暨慈濟醫院病理科
550	79	Hepatic carcinoid (Neuroendocrine carcinoma), liver	Cat	霍普獸醫病理診斷中心
551	79	Strumal carcinoid tumor of the ovary (SCTO) arising from mature cystic teratoma	Human	國軍桃園總醫院
552	79	Pheochromocytoma and Associated Cardiomyopathy	Meerkat (*Suricata suricatta*)	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,	North American	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

		the left forelimb 3rd and 4th digits, skin	cougar (*Puma concolor couguar*)	
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 *(Pogona vitticeps*)	國立中興大學獸醫病理生物學研究所

細菌

病例編號	會議場次	診　　斷	動物別	提　供　單　位
	1	Tuberculosis	Monkey	臺灣大學獸醫學系
7.	1	Tuberculosis	Human	省立新竹醫院
12.	2	H. pylori-induced gastritis	Human	台北病理中心
13.	2	Pseudomembranous colitis	Human	省立新竹醫院
26.	3	Swine salmonellosis	Pig	中興大學獸醫學系
27.	3	Vegetative valvular endocarditis	Pig	台灣養豬科學研究所
28.	4	Nocardiosis	Human	台灣省立新竹醫院
29.	4	Nocardiosis	Largemouth bass	屏東縣家畜疾病防治所
32.	4	Actinomycosis	Human	台灣省立豐原醫院
33.	4	Tuberculosis	Human	苗栗頭份為恭紀念醫院
53.	7	Intracavitary aspergilloma and cavitary tuberculosis, lung.	Human	羅東聖母醫院
54.	7	Fibrocalcified pulmonary TB, left Apex.	Human	林口長庚紀念醫院

		Mixed actinomycosis and aspergillosis lung infection with abscess DM, NIDDM.		
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 Trichosomoides crassicauda infestation	Rat	國立中興大學獸醫學院
374	53	Pulmonary coccidiodomycosis	Human	彰化基督教醫院
375	53	Paratuberculosis in Macaca cyclopis	Macaca cyclopis	國立屏東科技大學獸醫學院
379	53	Bovine Johne's disease (BJD) or paratuberculosis of cattle	Dairy cow	屏東縣家畜疾病防治所
380	53	NTB, Mycobacterium abscessus	Human	佛教慈濟綜合醫院暨慈濟大學病理科
382	54	Leptospirosis	Pig	國立屏東科技大學獸醫學院
384	54	Neisseria Infected Pneumonitis	Cat	中興大學獸醫學系
385	54	Mycobacteria avian complex dacryocyctitis	Human	花蓮佛教慈濟綜合醫院
387	54	Swine Erysipelas	Pig	屏東縣家畜疾病防治所
396	56	Suppurative meningitis caused by Streptococcus spp in pigs	Pig	國立中興大學獸醫病理生物學研究所
399	56	Listeric encephalitis in dairy goats	Goat	屏東縣家畜疾病防治所
435	63	Tuberculosis	Human	花蓮佛教慈濟綜合醫院
438	63	Porcine proliferative enteritis (PPE)	Pig	國立中興大學獸醫病理生物學研究所

446	64	Actinomycosis (lumpy jaw) in a dairy cattle	Cattle	國立中興大學獸醫病理生物學研究所
450	65	Mycobacterium avium infection	Human	花蓮佛教慈濟綜合醫院
464	67	Ulcerative actinomycotic squamous plaque with focal (basal) severe dysplasia, mucosa, gingivobuccal junction, right lower gingiva in a man	Human	嘉義聖馬爾定醫院
469	68	Scrub typhus	Human	佛教慈濟綜合醫院暨慈濟大學
489	71	Malakoplakia due to Escherichia coli infection, left testis	Human	佛教慈濟綜合醫院暨慈濟大學
492	71	Cystitis, bilateral ureteritis and pyelonephritis, hemorrhagic, necrotic, purulent, severe, diffuse, chronic progressive, urinary bladder, ureters and kidneys	Dog	國立中興大學獸醫病理生物學研究所
522	75	Secondary syphilis	Human	佛教慈濟綜合醫院暨慈濟大學
526	75	Dermatophilosis caused by *Austwickia chelonae (basonym Dermatophilus chelonae*) in a free-ranging wild Taiwanese japalure	Taiwanese japalure	台灣大學獸醫學系

病毒

病例編號	會議場次	診　　斷	動物別	提　供　單　位
21.	3	Newcastle disease	Chicken	台灣大學獸醫學系
22.	3	Herpesvirus infection	Goldfish	台灣大學獸醫學系
30.	4	Demyelinating canine distemper encephalitis	Dog	台灣養豬科學研究所
31.	4	Adenovirus infection	Malayan sun bears	台灣大學獸醫學系
50.	7	Porcine cytomegalovirus infection	Piglet	台灣省家畜衛生試驗所
55.	7	Infectious laryngo-tracheitis (Herpesvirus infection)	Broilers	國立屏東技術學院獸醫學系

69.	9	Pseudorabies (Herpesvirus infection)	Pig	台灣養豬科學研究所
78.	10	Marek's disease in native chicken	Chicken	屏東縣家畜疾病防治所
92.	11	Foot- and- mouth disease (FMD)	Pig	屏東縣家畜疾病防治所
101.	11	Swine pox	Pig	屏東科技大學獸醫學系
	13	Pseduorabies	Piglet	國立屏東科技大學
	13	Avian encephalomyelitis	Chicken	國立中興大學
	15	Contagious pustular dermatitis	Goat	屏東縣&台東縣家畜疾病防治所
	15	Fowl pox and Marek's disease	Chicken	中興大學獸醫學系
	16	Japanese encephalitis	Human	花蓮佛教慈濟綜合醫院
	17	Viral encephalitis, polymavirus infection	Lory	美國紐約動物醫學中心
	17	1. Aspergillus spp. encephalitis and myocarditis 2. Demyelinating canine distemper encephalitis	Dog	台灣大學獸醫學系
	19	Enterovirus 71 infection	Human	彰化基督教醫院
	19	Ebola virus infection	African Green monkey	行政院國家科學委員會實驗動物中心
	19	Rabies	Longhorn Steer	台灣大學獸醫學系
	20	Parvoviral myocarditis	Goose	屏東科技大學獸醫學系
	28	SARS	Human	台大醫院病理科
	28	TGE virus	swine	臺灣動物科技研究所
	28	Feline infectious peritonitis(FIP)	Feline	台灣大學獸醫學系
	30	Chicken Infectious Anemia (CIA)	Layer	屏東防治所
219	31	1. Lymph node: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 ll co-infection	Canine	國家實驗動物繁殖及研究中心

223	32	1. Skin, mucocutaneous junction (lip): Cheilitis, subacute, diffuse, sever, with epidermal pustules, ballooning degeneration, proliferation, and eosinophilic intracytoplasmic inclusion bodies, Saanen goat. 2. Haired skin: Dermatitis, proliferative, lymphoplasmacytic, subacute, diffuse, sever, with marked epidermal pustules, ballooning degeneration, acanthosis, hyperkeratosis, and eosinophilic intracytoplasmic inclusion bodies.	Goat	台灣動物科技研究所
238	35	Hydranencephaly	Cattle	國立屏東科技大學獸醫學系
248	36	Porcine Cytomegalovirus (PCMV) infection	Swine	國立屏東科技大學獸醫學系
250	36	Porcine respiratory disease complex (PRDC) and polyserositis, caused by co-infection with pseudorabies (PR) virus, porcine circovirus type 2 (PCV 2), porcine reproductive and respiratory syndrome (PRRS) 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

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 cavitary tuberculosis, lung.	Human	羅東聖母醫院
54.	7	Fibrocalcified pulmonary TB, left Apex. Mixed actinomycosis and aspergillosis lung infection with abscess DM, NIDDM.	Human	林口長庚紀念醫院
105.	13	Mucormycosis Diabetes mellitus	Human	花蓮佛教慈濟綜合醫院
	15	Eumycotic mycetoma	Human	花蓮佛教慈濟綜合醫院
	17	1. Aspergillus spp. encephalitis and myocarditis 2. Demyelinating canine distemper encephalitis	Dog	台灣大學獸醫學系
	43	Systemic Candidiasis	Tortoise	中興大學獸醫學院
	45	Alfatoxicosis in dogs	Canine	國立臺灣大學 獸醫專業學院
322	46	Allergic fungal sinusitis	Human	羅東博愛醫院
326	46	Meningoencephalitis, Aspergillus flavus	Cat	國立臺灣大學 獸醫專業學院
331	47	Histoplasmosis	Human	花蓮慈濟醫院病理科
332	47	Pulmonary Blastomycosis	Rat	中興大學獸醫學院
355	50	Encephalitozoonosis	Rabbit	國立中興大學獸醫學院
356	50	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院
386	54	Dermatophytic pseudomycetoma	Cat	台灣動物科技研究所
395	56	Systemic Cryptococcus neoformans infection in a Golden Retriever	Dog	國立台灣大學分子暨比較病理生物學研究所
441	63	Protothecosis	Dog	國家實驗動物繁殖及研究中心
449	65	Porcine epidemic diarrhea (PED)	Pig	國立台灣大學分子暨比較病理生物學研究所
519	75	Chicken infectious anemia in chicken	Chicken	國立中興大學獸醫學院
536	77	Skin infection of Orf virus	Human	佛教慈濟醫療財團法人花蓮慈濟醫院
545	78	Candida endocarditis	Human	佛教慈濟醫療財團法人花蓮慈濟醫院

寄生蟲（含原蟲）

病例編號	會議場次	診　　斷	動物別	提　供　單　位
14.	2	Dirofilariasis	Dog	台灣省家畜衛生試驗所
15.	2	Pulmonary dirofilariasis	Human	台北榮民總醫院
20.	3	Sparganosis	Human	台北榮民總醫院
46.	7	Feline dirofilariasis	Cat	美國紐約動物醫學中心
49.	7	Echinococcosis	Human	台北榮民總醫院
60.	8	Intestinal capillariasis	Human	台北馬偕醫院
64.	8	Adenocarcinoma of sigmoid colon Old schistosomiasis of rectum	Human	省立新竹醫院
66.	8	Echinococcosis	Chapman's zebra	台灣大學獸醫學系
67.	9	Hepatic ascariasis and cholelithiasis	Human	彰化基督教醫院
	13	Parasitic meningoencephalitis, caused by Toxocara canis larvae migration	Dog	臺灣養豬科學研究所
	17	Disseminated strongyloidiasis	Human	花蓮佛教慈濟綜合醫院
	17	Eosinophilic meningitis caused by Angiostrongylus cantonensis	Human	台北榮民總醫院 病理檢驗部
156	19	Parastrongylus cantonensis infection	Formosan gem-faced civet	中興大學獸醫學院
	19	Capillaria hepatica, Angiostongylus cantonensis	Norway Rat	行政院農業委員會 農業藥物毒物試驗所
	29	Colnorchiasis	Human	高雄醫學院附設醫院
	29	Trichuriasis	Human	彰化基督教醫院
	29	Psoroptes cuniculi infection (Ear mite)	Rabbit	農業藥物毒物試驗所
	29	Pulmonary dirofilariasis	Human	和信治癌中心醫院
	29	Capillaries 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 Spironucleus (Hexamita) muris	Rat	國家實驗動物繁殖及研究中心
327	46	Dermatitis, mange infestation	Serow	中興大學獸醫學院

328	46	Trichosomoides crassicauda, urinary bladder	Rat	國家實驗動物中心
362	51	Canine distemper virus infection combined pulmonary dirofilariasis	Dog	國家實驗研究院
370	52	Suppurative bronchopneumonia (Bordetellae trematum) with Trichosomoides crassicauda infestation	Rat	國立中興大學獸醫學院
416	59	Toxoplasmosis in a finless porpoise	Finless porpoise	國立屏東科技大學獸醫教學醫院病理科
	63	Liver milk spots in pig	Pig	中興大學獸醫病理生物學研究所
453	66	Liver fluke infection	Buffalo	中興大學獸醫病理生物學研究所
471	68	Haemosporidian parasite infection	pigeon	國立台灣大學分子暨比較病理生物學研究所
540	77	Systemic toxoplasmosis	Ring-tailed lemur	國立台灣大學分子暨比較病理生物學研究所
4.	1	Cryptosporidiosis	Goat	台灣養豬科學研究所
15.	2	Amoebiasis	Lemur fulvus	台灣養豬科學研究所
16.	2	Toxoplasmosis	Squirrel	台灣養豬科學研究所
17.	2	Toxoplasmosis	Pig	屏東技術學院 獸醫學系
51.	7	Pneumocystis carinii pneumonia	Human	台北病理中心
57.	8	Cecal coccidiosis	Chicken	中興大學獸醫學系
65.	8	Cryptosporidiosis	Carprine	台灣養豬科學研究所
211	30	Avian malaria, African black-footed penguin	Avian	臺灣動物科技研究所
242	35	Neosporosis	Cow	國立屏東科技大學 獸醫學系
263	38	Intestinal amebiasis	Human	彰化基督教醫院病理科
320	46	Cutaneous leishmaniasis	Human	佛教慈濟綜合醫院
325	46	Myocarditis/encephalitis, Toxoplasma gondii	Wallaby	國立臺灣大學獸醫專業學院
443	65	Brain toxoplasmosis in a man	Human	佛教慈濟綜合醫院病理科
462	67	Toxoplasmosis	Human	佛教慈濟綜合醫院病理科
470	68	Leucocytozoonosis	chickens	中興大學獸醫病理生物學研究所

立克次體

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

其他

病例編號	會議場次	診　　斷	動物別	提　供　單　位
216	30	Cytophagic histiocytic panniculitis with terminal hemophagocytic syndrome	Human	佛教慈濟綜合醫院病理科
359	51	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院
360	51	Septa panniculitis with lymphocytic vasculitis	Human	慈濟綜合醫院暨慈濟大學
9.	2	Perinephric pseudocyst	Cat	台灣大學獸醫學系
10.	2	Choledochocyst	Human	長庚紀念醫院
11.	2	Bile duct ligation	Rat	中興大學獸醫學系
37.	4	Myositis ossificans	Human	台北醫學院
75.	9	Acute yellow phosphorus intoxication	Rabbits	中興大學獸醫學系
76.	10	Polycystic kidney bilateral and renal failure	Cat	美國紐約動物醫學中心
80.	10	Glomerular sclerosis and hyalinosis, segmental, focal, chronic, moderate Benign hypertension	SHR rat	國防醫學院 & 國家實驗動物繁殖及研究中心
83.	10	Phagolysosome-overload nephropathy	SD rats	國家實驗動物繁殖及中心
85.	10	Renal amyloidosis	Dog	台灣養豬科學研究所
89.	10	Severe visceral gout due to kidney damaged infectious serositis	Goose	中興大學獸醫學系
91.	10	Hypervitaminosis D	Orange-rumped agoutis	台灣大學獸醫學系

	14	Cystic endometrical hyperplasia	Dog	臺灣養豬科學研究所
	14	Cystic subsurface epithelial structure (SES)	Dog	國科會實驗動物中心
	15	Superficial necrolytic dermatitis	Dog	美國紐約動物醫學中心
	15	Solitary congenital self-healing histiocytosis	Human	羅東博愛醫院
	15	Alopecia areata	Mouse	國家實驗動物繁殖及研究中心
	17	Avian encephalomalacia (Vitamin E deficiency)	Chicken	國立屏東科技大學獸醫學系
151	18	Osteodystrophia fibrosa	Goat	台灣養豬科學研究所&台東縣家畜疾病防治所
	20	Hypertrophic cardiomyopathy	Pig	台灣大學獸醫學系
	21	Chinese herb nephropathy	Human	三軍總醫院病理部及腎臟科
	21	Acute pancreatitis with rhabdomyolysis	Human	慈濟醫院病理科
	21	Malakoplakia	Human	彰化基督教醫院
	25	Darier’s disease	Human	高雄醫學大學病理科
191	27	1. Polyarteritis nodosa 2. Hypertrophic Cardiomyopathy	Feline	台灣大學獸醫學系
193	27	Norepinephrin cardiotoxicity	Cat	台中榮總
196	27	Cardiomyopathy (Experimental)	Mice	綠色四季
212	30	Kikuchi disease (histiocytic necrotizing lymphandenitis)	Lymphandenitis	耕莘醫院病理科
225	32	Calcinosis circumscripta, soft tissue of the right thigh, dog	Dog	台灣大學獸醫所
230	34	Hemochromatosis, liver, bird	Bird	台灣大學獸醫學系
234	34	Congenital hyperplastic goiter	Holstein calves	屏東縣家畜疾病防治所
236	34	Hepatic lipidosis (fatty liver)	Rats	中興大學獸醫學病理學研究所
237	35	Arteriovenous malformation (AVM) of cerebrum	Human	耕莘醫院病理科
244	35	Organophosphate induced delayed neurotoxicity in hens	Hens	中興大學獸醫學病理學研究所
257	37	Severe lung fibrosis after chemotherapy in a child with Ataxia- Telangiectasia	Human	慈濟醫院病理科
294	42	Arteriovenous malformation of the left hindlimb	Dog	台灣大學獸醫學系

299	43	Polioencephalomalacia	Goat kid	屏東家畜疾病防治所
310	44	Hyperplastic goiter	Piglet	屏東家畜疾病防治所
311	44	Melamine and cyanuric acid contaminated pet food induced nephrotoxicity	Rat	中興大學獸醫學病理學研究所
318	45	Alfatoxicosis	Canine	國立臺灣大學獸醫專業學院
333	47	Lordosis, C6 to C11	Penguin	國立臺灣大學獸醫專業學院
341	49	Pulmonary placental transmogrification	Human	羅東博愛醫院
345	49	Acute carbofuran intoxication	Jacana	國立中興大學獸醫學院
350	50	Malakoplakia, liver	Human	慈濟綜合醫院暨慈濟大學
351	50	Eosionphilic granuloma, Right suboccipital epidural mass	Human	羅東博愛醫院病理科
359	51	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院
360	51	Septa panniculitis with lymphocytic vasculitis	Human	慈濟綜合醫院暨慈濟大學
361	51	Hepatotoxicity of SMA-AgNPs	Mouse	國立中興大學獸醫病理生物學研究所
363	51	Hypertrophy osteopathy	Cat	國立臺灣大學獸醫專業學院
372	52	Snake bite suspected, skin and spleen	Monkey (red guenon)	國立臺灣大學獸醫專業學院
383	54	Langerhans cell histiocytosis	Human	聖馬爾定醫院病理科
388	54	Canine protothecosis	Dog	國立臺灣大學獸醫專業學院
392	55	Lithium nephrotoxicity	Human	佛教慈濟綜合醫院暨慈濟大學病理科
398	56	Gamma-knife-radiosurgery-related demyelination	Human	佛教慈濟綜合醫院暨慈濟大學病理科
400	56	Canine Disseminated form Granulomatous Meningoencephalitis (GME)	Dog	國立屏東科技大學獸醫教學醫院病理科
419	60	Mucopolysaccharidosis	Cat	國立中興大學獸醫病理生物學研究所
426	61	Phleboliths in a man	Human	台北醫學大學附設醫院口腔外科口腔病理科

427	61	Visceral gout in a Green iguana (Iguana iguana)	Iguana	中興大學獸醫病理生物學研究所
431	62	pulmonary alveolar proteinosis in a man	Human	羅東博愛醫院病理科
432	62	Congenital pulmonary airways malformation, type 2 in a women	Human	高雄醫學大學附設醫院
437	63	Large solitary luteinized follicular cyst of pregnancy and puerperium	Human	羅東博愛醫院病理科
454	66	Eosinophilic granuloma	Human	佛教慈濟綜合醫院暨慈濟大學病理科
461	67	Intestinal emphysema	Pig	中興大學獸醫病理生物學研究所
466	67	Nodular goiter	Human	彰化秀傳醫院病理科
474	68	Parastrongyliaisis (Previously called 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	Human	佛教慈濟綜合醫院暨慈濟大學病理科

		myocardial ischemia and acute kidney injury		
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

會 員 資 料 更 新 服 務

各位會員：

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

中華民國比較病理學會秘書處

張惠雯 助理教授

cscptaiwan@gmail.com

02-33661296

106 台北市羅斯福路四段一號 國立台灣大學 獸醫專業學院

----------中華民國比較病理學會----------

會員資料更改卡

姓　　名：_____　　會員類別：☐一般會員

☐學生會員

☐贊助會員

最高學歷：_____

服務單位：_____職　　稱：_____

永久地址：_____

通訊地址：_____

電　　話：_____傳　　真：_____

E-Mail Address：_____

中 華 民 國 比 較 病 理 學 會

誠摯邀請您加入

入會辦法

一、　本會會員申請資格為：

（一）一般會員：贊同本會宗旨，年滿二十歲，具有國內外大專院校（或同等學歷）生命科學及其它相關科系畢業資格或高職畢業從事生命科學相關工作滿兩年者。

（二）學生會員：贊同本會宗旨，在國內、外大專院校生命科學或其他相關科系肄業者（請檢附學生身份證明）。

（三）贊助會員：贊助本會工作之團體或個人。

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

二、　會員：

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

（二）常年會費：一般會員新台幣壹仟元，學生會員壹佰元。

【註：學生會員身份變更為一般會員時，只需繳交一般會員之常年會費】

三、入會費及常年會費繳交方式：以銀行轉帳或匯款（**006 合作金庫銀行、帳號：0190-717-052017、戶名：中華民國比較病理學會**）；並請填妥**入會申請表**連同**銀行轉帳交易明細表**或**匯款單**以郵寄或傳真方式寄回中華民國比較病理學會秘書處 張惠雯老師收。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：02-33661296

中華民國比較病理學會入會申請及會員卡

會電腦編號

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<tr><td rowspan="2">姓名</td><td>中文</td><td></td><td rowspan="2">姓別</td><td rowspan="2">□ 男
□ 女</td><td>出生</td><td>民國　年　月　日</td><td rowspan="2">出生地</td><td rowspan="2"></td></tr>
<tr><td>身份証</td><td></td></tr>
<tr><td>英文</td><td></td><td colspan="4">會員身份：□一般 □學生 □贊助</td></tr>
<tr><td rowspan="4">學歷</td><td colspan="3">(1)</td><td colspan="4">稱謂(圈選) 先生 小姐 醫師 獸醫師 教授 博士
研究員 主任 其他:</td></tr>
<tr><td colspan="3">(2)</td><td rowspan="3">研究興趣</td><td colspan="4">(1)</td></tr>
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永久：　　電話　　傳真：

電子信箱(E-mail)：</td></tr>
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中華民國比較病理學會
申請人　　簽章
介紹人　　簽章
介紹人　　簽章</td><td>審核結果</td></tr>
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中華民國　　年　　月　　日	