# AFIP Wednesday Slide Conference 1973-74

13 310	12.	=	11. "	8	10. "	9. 24 Oct 13		ço =	7.		2	5. 17 Oct 13	4.	=	4	2. "		10 Oct 73	Date of
31 Oct 73	NK6-2	12113		K73-221	72-759		72P572	V-17452	1500	7300	A12040		70N1489	73-1005	73-S-551	Octor	50251	A73-127	Contr.
	1457371	0000041		1455799		1457236	1458485	1456807		1457376	1400400	20000	1456802	1456803	1450002		1454829	1455887	AFIP #
	HIN		n Fr Detrick	Ontario		Edgewood	Col.St. U.	MEGERA	Money	Tenn.		AMC	Un. of Col.	Bionetics		Harshey Med. Ctr.	L. A. County	Brooks AFB	Contributor
	Rhesus		G. pig	Perch		Pig	Heifer		Mouse	Mouse		Cat	Lamb			Dog	Dog	Dog	Species
	parde		Skin	Eye	sk. muscle	Liver,	Skin		Thymus	Liver	duodenum	Spleen,	Dentat pau	1	Colon, L. N.	Pancreas	Sk., muscle	liver, spleen	Organ
		Sim. Hem. F.	Trichofolliculoma	Lymphocystis		Vit. E - Se del.	BVD	plasia	Immunoreactive hyper	Sch. mansoni		Mastocytosis	9	Blustonoue	Colitis & Enterobius sp	Dysgerminoma	Toxoplasmosis	liver allograft	Diagnosis Acute rejection of

28.	27.	26.	24.	23.	22.	21.	20.	17.	10.	18.	17.	-3	15	14. 010	o1 Oct 73
599	=	=	21 Nov 73	=	=	= 100	73		18			Nov 73			
19088	6634	735-319	S5095-1	73-405	72407	12041	2168-72	6078-17		23652-10		A-73-285	6689		19516
1455787	1457234	1458491	1457380	1456407	1457375	1455786	1455895	1456903		1455790	1456890	1455886	1457230		1456891
37 Fitzsimons	4 WRAIR	Colo. St. U.		U. of Ne		Ft. Detrick	Oregon St. U.	Johns Hopkins		Fitzsimons	Cornell	Brooks AFB	WRAIR	Ohio St. U.	U. of Ariz.
Rat	Dog	000	Tuppy	Call	Car	Rhesus	Hereford	Monkey		Rat	Foal	Monkey	Dog	Bull	Steer
Lung, liver	SKIR	ovary	Uterus,	Lung	To be a second	Tiver	Mes. L. Node	Colon		Liver	Lung	Lung	Cord	Mass	Liver
nensis and Capillaria	Calcinosis cutis	pyometra	Granulosa cell T.	Adenovirus	Reovirus	Reticuloendotheliosis	Anatrichosoma sp.		Colinie	Murine leukemia/ granulocytic sarcoma	Pneumocystosis	Post-infection meta- plasia	Granulomatous pachy- miningitis	Ultimobranchial adenoma	Fascioliosis Bac. Hemoglobinuria

45.	dia dia	43.	42. 9 Jan	41.	di C	39.	38. 2 Jan 74	37.	36.	35.	34. 12 Dec 73		33.	31. "	.0.	9. 5 10 73	2
A73-366-3	69-192				73-834	7350-1			50775	A-9005		7647-1	4322	13480	11730	-	
-3 1456329	1460825		1457382	1457220	1455882	1456767	7 1457303	1455894	1454836	1458482	1457373	1456886	1454832	1454833	1456768		1456893
9 Brooks AFB	5555		Tenn.	C. L. Davis Fdn.	U. of Wisc.	NADL	S. Dak. St.	U. Nebraska	L. A. County	Ani. Med. Ctr.	Tuskegee	Hopkins	NCI	NCI	Bionetics	Ft. Detrick	Hershey Med. Ctr.
Primate		Rhesus	Puppy	Marmoset	Dog	Bovine	Duck	Steer	Rabbit	Cat	Cow	Sheep	Rat	Mouse	Squirrel	Rat	Rabbit
e Spreen		Lung	ney, liver		Tonsil	Heart	Liver, int.	Brain	Liver, int.	Pituitary	Brain	Kidney	Liver	Liver	Skin	Liver, spleen	Sheath
	Amyloidosis	Pulmonary hydatid &		Hernesvirus canis	Squamous cell car.	Phinemer measurement	Duck virus enteriors	Polioencephalomalacia	Coccidiosis	Chromophobe adenoma	Listeriosis .	Copper poisoning	Dimethylnitrosamine hepatocarcinoma & hyperplasia	Dimethylhydrazine hepatopathy	Squirrel fibroma	Tularemia	Treponema cunicu

O China and a chin	Lung	Mouse	91 U. of Alabama	1460591	Feb 74 4652	<u></u>	000
Hemophilus sepuceum	Lung	Call	88 Oklahoma St. U.		73-366		61.
Salmonella	Liver	Parrot		1456902	72-239	=	60.
Actinobacillus equuli	Kidney	Foal			T-824-1	=	0 5
Subinvolution	Uterus	Dog				6 Feb 74	00
Inclusion body & rhinicis	Nose	Pig			71-767	s	57
Corona virus	Intestine	Calf	U. of Nebraska		73-1013	5	n .
Teratoma	Ovary	Mouse			K73-1015	4	31
Corynebacterium	Kidney	Trout	Ontario	1455800		30 Jan 74	4
ROCKY MILLS OF THE	Nares	Rhesus	Ft. Detrick	1455883	43140	Ŧ	UI.
Hypervitaminosis D.	Lung	Pony	Cornell U.	14556892	71-884	3	52.
Pasteurella & Mycoplasma	Lung	Lamb	U. of Nebraska	170007	4	=	51.
ICH & distemper	Liver, kid- ney, bladder	Puppy	L. A. County	1454835	2146-72	23 Jan 74	50. 23
Plasma cell myeloma	Spleen	Cat		1455808	1426-73	1	
Inclusion body hepatitis	Liver	Chicken		1455879	2526-73		
Ulcerative colitis	Colon		Hopeins St. U.	1456885	6531-23		10 5
Carcinoma	Sinus	Dog		1471339	6226-1	n 74	, & Tan
Gout	Viscera	Snake					

63.

	Neurofibroma	Skin & muscle	Chicken	4 USDA (B)	1460594	20 Mar 17	78. 203
1460592	Chr. granutous	Spleen, liver	Pig				
1460592   U. of Alabama   Dog   Liver   He	Fatty liver synd	Liver	Chicken				76.
1460592   U. of Alabama   Dog   Liver   He     72-339	Pseudotubercusosis	Liver	Monkey			(5-70)	75.
1460592 U. of Alabama Dog Liver Hepatoma  72-339 1460664 Letterman Monkey (esophagus) Molineus tor  72-332 1454830 L. A. County Dog Skin Sweat gland  72-332 1455871 Tuskegee Sucker Body Myxosporidi  72-2483 1455897 U. of Wisc. Pony Heart Strongyles  72-2483 1455885 U. of Wisc. Cat L. node sm. int.  73-839 1455885 U. of Wisc. Cat sm. int.  73-839 1455789 Fitzsimons Dog Lung  20779 1455789 Fitzsimons Dog Lung  73-D-286 1459688 Hershey Cat gland  73-5-228 145689 Hershey Cat gland  73-5-228 145689 Hershey Cat gland  73-5-228 Liver Gossypol	Midzonal necrosi	Liver	Pig	Kansas St. U.			74. 6 Mar 74
1460592   U. of Alabama   Dog   Liver   He	Gossypol toxicity	Liver	Pig	Kansas St. U.		73	73.
1765         1460592         U. of Alabama         Dog         Liver         He           72-339         1460664         Letterman         Monkey         Intestine (esophagus)e         Monkey         Monkey         Intestine (esophagus)e         Monkey         Monkey         Monkey         Intestine (esophagus)e         Monkey         Monkey <td>Hyperplasia or ad</td> <td>Mammary gland</td> <td>Cat</td> <td>Hershey</td> <td>1456889</td> <td>1 3300</td> <td>72.</td>	Hyperplasia or ad	Mammary gland	Cat	Hershey	1456889	1 3300	72.
1765     1460592     U. of Alabama     Dog     Liver     Hepatoma       72-339     1460664     Letterman     Monkey     Intestine (esophagus)*     Molineus tor (esophagus)*       72-332     1454830     L. A. County     Dog     Kidney     1 CH       K73-1108     1455877     Ontario     Sucker     Body     Myxosporid       K73-1108     1455897     U. of Wisc.     Pony     Heart (esophagus)*     Fibroelasto (Strongyles)*       72-2483     1455885     U. of Wisc.     Cat (esophagus)*     L. node (esophagus)*     Feline Inf.       73-839     1455885     U. of Wisc.     Cat (esophagus)*     Lung (esophagus)*     Amyloidos	Hepatitis. Herpes Diplococcus		Guinea pi	Hershey	1455789	20779	71.
1460592 U. of Alabama Dog Liver Hepatoma 12-339 1460664 Letterman Monkey (esophagus)e (Candidiasis) 39845 1454830 L. A. County Dog Skin Sweat gland 1458511 Tuskegee Dog Kidney 1 CH 1455877 Ontario Sucker Body Myxosporidi 1455897 U. of Wisc. Pony Heart Strongyles 1455885 U. of Wisc. Cat L. node sm. int.	Amyloidosis	Lung	Dog	Fitzsimons			70. 27 Feb 74
1460592 U. of Alabama Dog Liver Hepatoma 1460664 Letterman Monkey Intestine (Candidiasis) 1454830 L. A. County Dog Skin Sweat gland 1458511 Tuskegee Dog Kidney 1 CH 1455877 Ontario Sucker Body Myxosporidi 1455897 U. of Wisc. Pony Heart Strongyles		L. node sm. int.	Cat	U. of Wisc.	1455885		=
1460592 U. of Alabama Dog Liver 19 1460664 Letterman Monkey Intestine (esophagus)4 5 1454830 L.A. County Dog Skin 1458511 Tuskegee Sucker Body	Fibroelastosis or Strongyles	Heart	Pony	Visc.			=
1460592 U. of Alabama Dog Liver 1460664 Letterman Monkey Intestine (esophagus)4 5 1454830 L.A. County Dog Skin 5 1454830 L.A. County Dog Kidney	Myxosporidiosis	Body	Sucker				=
1460592 U. of Alabama Dog Liver  1460664 Letterman Monkey Intestine (esophagus)4  1. A. County Dog Skin	1 CH	Kidney	)ogq				70 Feb 74
1460592 U. of Alabama Dog Liver  1460664 Letterman Monkey Intestine	Sweat gland tumor	Skin					s.
f Alabama Dog Liver	Molineus torulosis (Candidiasis)?*	intestine esophagus)	key			ō	13 Feb 74
	Hepatoma	iver		0			

					+	08.	
						11	
		0	18 S. Dakota St.	1457218	73-6844		
Acute iron toxicity	Liver	Steer				97.	
	gland	Dog	8 U. of Arizona	1456888	73-1006	96.	
Osteosarcoma	Mammary		6	1460826	2594	95.	+0
THE STATE OF THE S	=	=		1404001	3227		
CRD	Lung	Mouse		2000		17 Apr 74	0.4.
Lepto	Kidney	Pig	Geog. Zoon., AFTP	1450754	73-1192		93.
Parathyroid adenoma	Mediastinum	Dog		1457372	425-73	=	92.
Enterotoxemia nephritis	Kidney	Sheep	Edgewood	1457220	763-72		0,00
Habronemiasis	Skin	Horse	Edgewood	1450000	54803	10 Apr 74	)
Renal osteodystrophy	Spine	Rat	Merck	0000		9	89.
epiz. hem. dis.	Brain, liver	Deer	Tenn.	1457378	73-1840	9 8	88
Bile duct ca.	Liver	Cat	U. of Calif.	1459422		11	87.
Phalaris toxicity	Brain	Ewe	U. of Calif.	1456801		3 Apr 74	36.
Mycotic rumenitis	Rumen	Steer	USDA (Ames)	404000		3	0 4
Mycoplasma pericardins	Heart	Pig	AFRRI	1400000		7	000
Cytomegalovirus		Guinea pig Lung, etc	rman			" 10	2 5
Giant cell epulis	Gums G	Cat				27 Mar 74 0-	
Liposarcoma	SubQ L	Dog	н	1458401		.22292	
Hypoderma lineatum	Brain H	Steer	St. U.		22	2, har 74 S73	12
Sebaceous adeno-	Skin Se	Dog	FDA				

	115. 22 May 74 P7	=	4	=	15 May 74	=	110. " 71-447		108 8 May 74 K73-1103	-	105. 13546		1 May 74 A73-299-17	102. 69-1092		11	1	pr 74 4499	
S2650 1457229	P72-683 1457370	73-598-12 1490751		73-1022-35 1490764							1460598	1460595	140000	1456810	1457238	1457232			
9 C.L.Davis	NE					U. Cal.	NZP	Pfizer	Cornell	Ontario	Ani. Med. Ctr.	= (	USDA, Beltsville	Brooks AFB	Bionetics	NH NH	NCI	NCI	
Monkey		Monkey	Pig	Horse	Horse	Horse	Blackbird	Fish	Fish	n is	Cat	Cow	Chicken	Cat	Rat	Mouse		Rat	Rat I
t E		Nose	Colon	Stifle joint	Salivary gl.	Lung	Aorta	Viscera	Back	Abdomen	Bone	Skin	Bone	Bone	Liver	Heart	Lung	Colon	Int.
	Kaolin granulomas	Sim. Hem. F.&	Dysentery	Synovitis, vasculitis		Adenovirus & pneumocyst	Arteritis & aneurysm	Visceral granuloma	Neurofibroma	Flukes	Fibrous dysplasia	Hypoderma bovis	Osteopetrosis	Panleuk	Hepatoma	Myocarditis, rupture	Pneumonia - Yersinia	Adenoca.	Enteritis-azoxym nane

-	127.	126.	=	= 1	5 Jun 74	11	=	=	29 May 74	119. " 46126	118. 22 May 74 . A17482	
73-394	1455881	73D108 145848b	22192 1458493	V-21461 1456811	73-333 1456884	73064 1491978	72-287 1460600	518-73 1457368	23828 1455788		1460599	
	Wisc.					ona				Fitzeimons Do	п	Disser Mc
	0	Dog	Calf	Cow	Hamster /	Cat	Dog 3	Dog H	Dog L	94	Raccoon Li	Monkey Kic
		Kidney	Colon	Rumen	Abdomen	fammary gl	3rd eyelid	Heart	Lymph node	Liver & bone	Liver	Kidney
		Glomerulonephritis, plus	Coccidiosis	Rumenitis-overeating	Teratoma	Mammary gl. Hypertrophy	Adenoca, gland of 3rd 11d	Hemangiosarcoma	Reticulum cell sarcoma	Adenoca, bile duct?	Hepatic necrosis - Herpesvirus	Acute tubular necrosis

128.

## AFID Wednesday Slids Conference 10 October 1973

Case 1 - A73-127 - These tissues are from a dog which died 8 days after an experimental surgical procedure. Some of the lesions were probably secondary to drugs given in conjunction with surgery.

Case II - 50251 - This lisaue section is from the rear leg of a dog which had rear leg lameness followed by paralysis.

Case III - 73-S-551 - This tissue is from an 8-1/2 year old female miniature pinscher with an abdominal mass.

Case IV - 73-1005 - (2 slides) - An II-year-old female chimpanzee died following an intractable diarrhea.

## A FYR Wednesday Fill to Conferences 10 Colphan 1973

Case 1 - A73-127 - The dog in this case had received a liver allograph 8 days prior to death. Surgery was uncomplicated. The dog maintained a low grade fever and became increasingly ictoric. He had received 6 deeps of antilymphayte globulin. Necropsy showed a "matriceg" liver, become into the small intestine, and "Coca Cola" (contributor's term) colored write. All anastomoses were open and functioning.

The liver demonstrates an acute rejection syndrome. The spicer shows necrosis of lymphocytes which is probably accordary to the action of antilymphocyte globulin. The kidney shows a severe glomerulonephritis.

Ref.: Taylor, Harold E.: Pathology of organ transplantation on man.
pp. 173-199, IN: Pathology Annual. New York, AppletonCentury-Crofts Educational Division of Meredith Corp., 1972.

Chase, William H., et al.: Ultrastructural study of the glomerulonephritis produced by antilymphocyte globulin in monkeys. Lab. Invest. 27: 393-399, 1972.

Case II - 50251 - This dog had a chronic inflammation of the skeletal murchs in the rear log and Toxoplasma gondii organisms were present in and around the losion. These organisms could be seen within cysts and as single organisms which were loose in the lesion. Numerous toxoplasma organisms were also present within the alveolar living cells in the lungs. (lung section not seen).

Case W = 73-8-531 - The neoplasm is an ovarian dyngerminame, which had metastasized to the pancreas. Several lymph nodes were also involved. Most attendees at the conference believed this neoplasm to be of pancreatic islet cell origin. The primary lesion in the ovary was not present in the conference material.

Ret.: Andrews, E. J., Stockey, J. L., Helland, D. and Staughter, b. J.: A histopathologic study of canine and feline ovarian dyager of norms. Canad. J. Comp. Med. (In Press) 1973. RESULTS 10 DIT 73

Captilly 73-1000 content return it shis 11-percent characters were to be be been control of the lower interitual arms to the asserted connected connected connected by being lymph modes. The 'arcavisal lesions were considered by homographic in the color and occase with preadon embranc formation. The lymph nodes contained numerous firm yethering nothing with caseson, semi-liquid or liquid content.

Pseudomonus ap. was cultured from the large intestine. The contributor presumed the numerous negatives parasitus to be Econfesentarium ep. Most conference attendons thought the pressites early Enterphis verticularis. The diagnosis of E. vermicularis was also the opinion of a peresitologist

who was consulted,

HAR All

#### Histories AFIP Wednesday Slide Conference 17 October 1973

Case I - 70N1489 - This feeder lamb was one of a flock of 350 animals. Four lambs including the subject case were showing signs of excessive salivation, anorexia, fever and lameness for several days.

Case H - A-12040 - These tissues are from a 10-year-old cat that had a poor appetite and was vomiting. During examination, a palpable abdominal mass was discovered.

Case III - 7300 - This tissue is from a mouse with an experimental infection.

Case IV - V-17452 - This section is from an incidental finding in a 14-month-old, female ICR/Ha mouse.

#### Results AFIP W-Incade, Silde Conference 17 October 1973

Case I - 70N1489 - This lamb had a hemogrhagic ulcerative stomatitis with proliferative vasculitis in the dental pad. A necrotizing vasculitis was present within the pulmonary artery. Bluetongue virus was isolated from tissues of this animal.

Case II A-12040 - This cat was diagnosed as having malignant mastocytosis with duodenal ulcers. Duodenal ulcers are commonly found in conjunction with malignant mast cell tumors in cats.

Case III - 7300 - This mouse has a granulomatous hepatitis caused by an experimental infection with Schistosoma mansoni.

Ref.: Von Lichtenberg, F., Erickson, D. G., Sadum, E. H.: Comparative histopathology of Schistosome granulomas in the hamster. Am. J. of Path. 72: 149-178, Aug. 1973.

Case IV - V-17452 - The constributor diagnosed this mouse as having immunoreactive thymic hyperplasia. Many well developed germinal centers were present within the thymic medulla, and the cortex was marked by atrophy. This type of change occurs in most female mice of this strain at this age. The males of the same age invariably have normal thymuses. Many of these female ICR/Ha mice had changes in their kidneys suggestive of membranous glomerulonephritis.

Ref.: J. Path. Bact. 88: 229, 1964.

## AFIP Wednesday Slide Conference

24 Octuber 1973

Case 1. 72F572- This section of skin was taken from the azillary area of a 1-year-old heifer. All of those present at the conference diagnosed the lesion as a dermatitis, and several people mentioned the prescece on individual cell necrosis within the epidermis. Several possible causes were considered by the attendees, including thallium toxicity, bacteria, and viruses. As to the latter, 2 individuals thought that the lesion may have resulted from a virus diarrhea infection.

Contributors Diagnosis: Necrotic dermatitis characteristic of virus diarrhea.

This animal was one of 300 that had been vaccinated 2-3 weeks previously for BVD, while an outbreak of the disease was in progress. At necropsy there were scattered erosions in the oral cavity, esophagus, and rumen. In addition, there was catarrhal enteritis and a hyperplastic enlargement of the spleen and mesenteric lymph nodes.

Contributor: Colorado State University

Reference: Chenekatu, P., Tyler, D., and Ramsey, F. (1967). Characteristics of a Condition Following Vaccination With Bovine Virus Diarrhea Vaccine.

JAVMA 150:46.

Case 2. 759-72- These tissues were from one of many dead feeder pigs in a group of 200. No clinical signs were noted prior to death. There was complete agreement among those at the conference that the lesions in the myocardium and skeletal muscle were representative of a nutritional myopathy.

The liver was characterized by midzonal necrosis and congastion. Most thought that the condition was due to a vitamin E and/or Selengum deficiency. Contributors Diagnosis: Hepatosis dieuatica, cardiae microenglopathy, and muscular dystrophy due to vitamin E and/or Selenium deficiency.

Contributor: Edgewood Arsenal

Case 3. K73-221- This section of eye was taken from a Silver Perch (Bairdiella chrysura) caught in the Gulf of Mexico. Grossly the fish was covered by white egg-like masses. All of those present diagnosed the lesion as ocular lymphocystis disease.

Contributors Diagnosis: Ocular Lymphocystis Disease.

Contributor: Ministry of Agriculture, Ontario, Canada.

Case 4. 12113- This section of skin was taken from the dorsal cervical region of an 11-year-old male standard poodle. The mass was approximately 11 cm in diameter, ulcerated and hemorrhagic. A number of diagnoses were offered for this tumor including; hair matrix tumor, calcifying epithelioma, trichpepithelioma, squamous cell carcinoma, and trichpearcinoma. Everyone agreed that the inflammation present was in response to the keratin debris.

Contributors Diagnosis: Trichofolliculoma

Contributor: Ft. Detrick, Md.

Reference: Ediger, R., Dill, G., and Kovatch, R.(1971). Trichofolliculoma of the Guinea Pig. J. Natl. Cancer Inst. 46: 517-523.

# Histories AFIP Wednesday Slide Conference 31 October 1973

Case I - MKG-2 - This tissue was taken at necropsy from a Rhesus monkey with an acute, febrile disease.

Case II - 19516 - A feedlot steer showing respiratory distress and acute abdominal discomfort died within 20 minutes after removal from its pen for an antibiotic injection. At necropsy, a large dark spot was noted in a friable, bile covered liver.

Case III - This tissue section is from an 11-year-old Jersey bull which had developed a progressive skeletal disease during the past 3 years. The animal had posterior lameness and palpable swellings in the anterior cervical area.

Case IV - 6689 - These tissue sections are from a 9-year-old dog which had exhibited posterior paralysis for one month.

# Results AFIP Wednesday Slide Conference 31 October 1973

Case I - Mk6-2 - This tissue was taken from a rhesus monkey that had an acute febrile, hemorrhagic disease. The majority of those present diagnosed the condition as Simian hemorrhagic fever and thought that one of the most characteristic features of the disease was the large amount of fibrin present in the splenic sinusoids.

Contributors diagnosis: Simian hemorrhagic fever.
Contributor: National Institutes of Health.

Ref.: Polner, A., et al.: Simian hemorrhagic fever. I. Clinical and epizootiologic aspects of an outbreak among quarantined monkeys. Amer. J. Trop. Med. Hyg. 17: 404-412, 1968.

Allen, A., et al.: Simian hemorrhagic fever. II. Studies in pathology. Am. J. Trop. Med. Hyg. 17: 413-421, 1968.

Tauraso, N., et al.: Simian hemorrhagic fever. III. Isolation and characterization of a viral agent. Am. J. Trop. Med. Hyg. 17: 422-430, 1968.

Case II - 19516 - A feedlot steer exhibiting respiratory distress and acute abdominal discomfort died 20 minutes after removal from its pen for an antibiotic injection. At necropsy, a large dark spot was noted in a friable, bile colored liver. All of those attending the conference diagnosed the liverlession as representative of that seen in bacillary hemoglobinuria.

Contributor's diagnosis: Fascioliasis, chronic pericholangitis, thrombosis, infarction, all lesions associated with bacillary hemoglobinuria.

Contributor: University of Arizona.

Case III - L1795-1 - An 11-year-old Jersey bull owned by an artificial insemination cooperative, had over the past 3 years, developed progressive skeletal disease with posterior lameness and palpable swellings in the anterior cervical area. At necropsy there was severe degenerative osteo-arthritis, ankylosing spondylosis, vertebral osteosclerosis, and replacement of the anterior cervical lymph nodes by white fine tissue. Multiple white nodules were scattered throughout all lobes of the lung and the left adrenal gland was enlarged to 4 times its normal size. Two other bulls in the breeding cooperative were affected in a similar manner.

Contributor's diagnosis: Ultimobranchial adenoma.
Contributor: Ohio State University.

Ref.: Wilkie, B., and Krook, L.: Ultimobranchial tumor of the thyroid and pheochromocytoma in the bull. Path. Vet. 7: 126-134, 1970.

Young, D., et al.: Calcitonin activity in ultimobranchial neoplasms from bulls. Vet. Path. 8: 19-27, 1971.

Case IV - 6689 - These sections of spinal cord are from a 9-year-old dog which exhibited posterior paralysis for one month. The majority of those present diagnosed the lesion as a granulomatous pachymeningitis.

Contributor's diagnosis: Granulomatous pachymeningitis secondary to a ruptured thoracic intervertebral disc.

Contributor: WRAIR.

KENNETH M. AYERS Capt., USAF, VC Veterinary Pathology Division

# Histories AFIP Wednesday Slide Conference 7 November 1973

11:2 11

Case I - A73-285 - A newly acquired cebus monkey died during quarantine.

Approximately 60 to 70% of the lung parenchyma contained lesions similar to those present in the tissue section. An acute, severe, catarrhal enteritis was also present.

Case II - 44229 - (2 slides; H&E and toluidine blue) - A 3-month-old female, half-Arab foal was ill for 4 weeks from a respiratory disease which was not responsive to antibiotics.

Case III - 23652-10 - This tissue represents an incidental finding in a 414g male rat from a Vitamin A study.

Case IV - 6978-17 - These tissue sections are from a female spider monkey with recurrent diarrhea.

# Results . AFIP Wednesday Slide Conference 7 November 1973

Case I - A-73-285 - A newly acquired cebus monkey died during the quarantine period and at necropsy 60 to 70% of the lung parenchyma contained lesions similar to those present in the tissue section. An acute, severe, catarrhal enteritis was also present. A number of diagnoses were offered by those attending the conference, including squamous metaplasia, lobular pneumonia, and pneumonitis. Several people thought the condition to be viral in origin.

Contributor's diagnosis: Post-infection hyperplastic squamous metaplasia of alveoli and bronchioles. This condition has been described in man following various viral pulmonary diseases. The contributor felt that in this case, the lung changes followed a measles infection in that an outbreak of measles had occurred 6 weeks prior to the death of this animal. Within alveoli were a few giant cells and syncytial cells as well as some ghosts of inclusion bodies. Contributor: Pennsylvania State University.

Ref.: Spencer, H.: Pathology of the lung. Permagon Press, 1968.

Case II - 44229 - A 3-month-old female half-Arabian foal was ill for 4 weeks with a respiratory illness which was not responsive to antibiotics. The opinion of those present at the conference was unanimous that this represented a Pneumocystis carinii infection.

Contributor's diagnosis: Pneumocystis carinii.
Contributor: Cornell University.

Case III - 23652-10 - This tissue represents an incidental finding in a 414 gm male rat used in a vitamin A study. Most of those attending diagnosed this as a murine leukemia.

Contributor's diagnosis: Murine leukemia/granulocytic sarcoma.

Contributor: Fitzsimmons Army Hospital.

RESULTS 7 NOV 73

Case IV - 6978-17 - A female spider monkey had recurrent diarrhea.

At necropsy, there was splenomegaly, mesenteric lymphadenopathy, and small nodules in the colonic mucosa. The attendees were somewhat divided as to the cause of this lesion with amoeba and Salmonella sp. being the etiologic agents most frequently mentioned.

Contributor's diagnosis: Colitis with paratyphoid nodules. Salmonella typhimurium was cultured from the mesenteric lymph nodes.

KENNETH M. AYERS Capt., USAF, VC Veterinary Pathology Division HERE

# Histories AFIP Wednesday Slide Conference 14 November 1973

Case I - 2168-72 (2 slides; H&E and Acid fast) - The tissue in this section is a mesenteric lymph node from an 18-month-old Hereford that had diarrhea for 3 months.

Case II - 12041 - This tissue section contains an incidental finding in a young male Rhesus monkey.

Case III - 72-407 - This tissue is from a 3-year-old male cat which was unable to eat, drink or move for 3 days prior to death. The mucous membranes were icteric and hemorrhages were present in the lungs, heart and urinary bladder.

Case IV - 72-405 - This is a section of ileum from a gnotobiotic calf killed 6 hours after the onset of diarrhea caused by an experimental infection. The calf was 54 hours old at death. The sections numbered 69-796 are from the ileum of a gnotobiotic control calf which was 72 hours old when killed.

## Results AFIP Wednesday Slide Conference 14 November 1973

<u>Case I - 2168-72 - This section of lymph node was taken at necropsy from an 18-month-old female Hereford that had been scouring for 3 months. All of those at the seminar diagnosed the lesion as a granulomatous lymph-adenitis due to Johnes disease.</u>

Contributors Diagnosis: Paratuberculosis (Johnes disease).
Contributor: Oregon State University.

Case II - 12041 - This section from the nose was an incidental finding in a rhesus monkey. The parasites present were variously identified by those at the conference as Capillaria sp., Gongylonema sp. and Anatrichosoma sp.

Contributor's Diagnosis: Anatrichosoma cynamolgi, external nares.
Contributor: Fort Detrick, Md.

<u>Case III - 72-407 - A 3-year-old male cat would not eat, drink, or move</u>
for 3 days and finally died. At necropsy, the mucous membranes were icteric
and hemorrhage was present in the lungs, heart, and urinary bladder. Most
of those attending the meeting thought this was representative of a myeloproliferative disorder.

Contributor's Diagnosis: Reticuloendotheliosis. Contributor: Tuskegee RESULTS 14 MIV 73

Case IV - 72-405 - Sections of ileum from a 54-hour-old gnotobiotic calf experimentally infected, and from a 72-hour-old gnotobiotic control calf are presented. Opinion was mixed as to the etiology of the alterations in the infected calf, and the etiologic agent was not specifically identified although most thought it was viral in origin.

Contributor's Diagnosis: Reo-like calf diarrhea infection. Contributor: University of Nebraska

Ref: Pathology of Neonatal Calf Diarrhea Induced by a Reo-like Virus. Vet. Path. 8: 490-505 (1971).

KENNETH M. AYERS Capt., USAF, VC Veterinary Pathology Division have all

# Histories AFIP Wednesday Slide Conference 21 November 1973

Case I - S5095-1 - This lung tissue is from a 2-month-old, female,
German shepherd dog which was owned by a pet store. Distemper, hepatitis
and leptospirosis vaccine was administered on 3 and 14 August. The
puppy was inactive and anorectic on 18 and 19 August. Death occurred
on 20 August.

Case II - 73S319 - A 9-year-old poodle was presented with alopecia over the back, ventral abdomen, and sides. The abdomen was filled with fluid and the vulva was swollen and turgid. There was a small amount of vaginal discharge and the dog had a total WBC of 22,500.

Case III - 6634 - This skin biopsy was removed from a 6-year-old mixed breed female dog. The animal exhibited bilateral alopecia and focal areas of hyperpigmentation were present over the chest and abdomen.

Case IV - 19088 - (2 slides) - These tissues are from a mature, male, Polynesion rat (Rattus exudous) found in a wooded area west of Denver, Col.

> PHILIP W. BLUMER Capt., USAF, VC Veterinary Pathology Division

John,

John,

Slides from Case I

(1stide)

John Case II

(1stide)

John Moself

Total file them Moself

R.E.

## Results AFIP Wednesday Slide Conference 21 November 1973

Case I - S5095-1 - This section of lung was from a 2-month-old puppy which was owned by a pet store. It became inactive, anorectic, and died.

Contributor' diagnosis: Necrotizing bronchitis and bronchiolitis with proliferative interstitial pneumonia compatible with canine adenovirus infection.

Contributor: Ohio State University.

Ref.: Swango, L., et al.: A comparison of the pathogenesis and antigenecity of infectious canine hepatitis virus and A26/61 virus strain (Toronto). J. A. V. M. A. 156: 1687-1696, 1970.

Case II - 73S-319 - A 9-year-old poodle was presented with alopecia over the back, ventral abdomen, and sides. The abdomen was filled with fluid and the vulva was swollen and turgid.

Contributor's diagnosis: Grapulosa cell tumor with cystic endometrial hyperplasia and pyometra.

Contributor: Colorado State University.

Case III - 6634 - Skin biopsy from a 6-year-old dog with bilateral alopecia and focal areas of hyperpigmentation over the chest and abdomen.

Contributor's diagnosis: Calcinosis cutis due to Cushing's syndrome.

Contributor: WRAIR.

Case IV - 19088 - Tissues from a Polynesian rat found in a wooded area west of Denver, Colorado.

Contributor's diagnosis: Verminous pneumonia due to Angiostrongylus cantonensis and granulomatous hepatitis due to Capillaria hepatica.

Contributor: Fitzsimmons Army Hospital.

KENNETH M. AYERS Capt., USAF, VC Veterinary Pathology Division

\*Note: Due to the annual ACVP meeting, there will be no slide conference on 28 November 1973.

Home all

# Histories AFIP Wednesday Slide Conference 5 December 1973

Case I - 72-B-531 - A male Dutch belted rabbit had ulcerated, encrusted lesions about the penis.

Case II - 11738 - A 150 gm male White rat was inoculated intraperitoneally with an infectious agent and killed 72 hours later.

Case III - (labeled squirrel) - This tissue was obtained from a feral, gray squirrel with generalized, cutaneous nodules.

Case IV - 2 slides; 13480 and 4322 - The tissue on slide 13480 is from a mouse which died following an injection with an experimental agent.

Slide 4322 is from a rat which has been exposed to a different agent for 10 weeks in the drinking water. The rat was killed 25 weeks after the first exposure.

## Results AFIP Wednesday Slide Conference 5 December 1973

Case I - 72-R-531 - A mature male Dutch belted rabbit had ulcerated, encrusted lesions about the penis. The majority of those at the conference diagnosed the lesion as a posthitis and thought it was representative of rabbit syphilis.

Contributor's diagnosis: Treponema cuniculi infection (Rabbit Syphilis).

It was stated that the animal had a positive titer by the rapid plasma reagent method.

Contributor: Pennsylvania State University.

Case II - 11738 - A 150 gm male rat was inoculated intraperitoneally with an infectious agent and was killed 72 hours later. Most of those attending the seminar agreed that the liver lesion was a granulomatous hepatitis, while the splenic lesion was necrotizing in nature. Opinion as to the etiology was mixed and included Tyzzer's disease, viral infection and tularemia.

Contributor's diagnosis: Multifocal pyogranulomatous hepatitis and necrotizing splenitis. Etiology Francisella tularensis (tularemia). Contributor: Ft. Detrick, Md.

Case III - This section was taken from a feral gray squirrel with generalized, multiple cutaneous nodules. The majority of those attending the session thought the lesion was representative of squirrel pox, though the possibility of squirrel fibroma was mentioned.

Contributor's diagnosis: Squirrel fibroma (Pox virus).

Contributor: Bionetics Laboratories.

Ref.: King, et al.: Naturally occurring squirrel fibroma with involvement of internal organs. J. Wildlife Dis., October, 321, 1972.

<u>Case IV - Slide 13480</u> - Section of liver from a mouse that died following infection of an experimental agent. The most frequently used terms used to describe the lesion by those at the conference were biliary hyperplasia and megalocytosis. Many thought it was toxic in origin and pyrilizodine was mentioned.

Contributor's diagnosis: Hepatopathy. The animal had been injected with dimethylhydrazine, a hepatic and colon carcinogen.

Ref.: Thurnhen, et al.: Cancer Res. 33: 940, 1973.

Case V - Slide 4322 - This rat had been exposed to an agent in its drinking water for 10 weeks. Most thought the lesion to be a hepatocellular carcinoma.

Contributor's diagnosis: Hepatocellular carcinoma and nodular hyperplasia from feeding diethylnitrosamine.

Contributor: National Cancer Institute.

Ref.: Reuber, J.: J. Natl. Cancer Inst. 41: 113-1140, 1968. Reuber, J.: J. Natl. Cancer Inst. 34: 697, 1968.

> KENNETH M. AYERS Capt., USAF, VC Veterinary Pathology Division

por -

## AFIP Wednesday Slide Conference 12 December 1973

Case I - 7547-1 - This kidney section is from one of 50 dead sheep from a flock of 1000. The sheep died after a chronic illness characterized by icterus and hemoglobinuria.

Case II - 72-97 - A 6-year-old Hereford cow had unilateral facial paralysis.

Case III - A-9005 - This tissue section is from an 11-year-old, domestic Short-haired cat.

Case IV - 30775 - Numerous rabbits were dead or dying from a group kept by a zoo to feed the reptiles.

### AlVI Victorday Slice Conference 12 December 1973

Case I - 7647-1 - This kidney seeting is from one of 50 dead sheep in a trock of 1000. The animal died after a chresic illness characterized by interest and hemoglobinaria. Most of those present at the conference diagnosed the condition as a toxic pephrosis and thought it was probably due to a plant poisoning. Mention was also made of what appeared to be exalate crystals in many tubules.

Contributor's diagnosis: Hemoglobinuric nephrosis due to copper poisoning.

Toxic levels of copper were recovered from the livers of 2 tested sheep.

The feed contained high levels of copper and no detectable molybdenum. Top dressing with molybdenum and sulfates, and withdrawal of mineral supplementa climinated the problem.

Contributor: Johns Hopkins University

Case II - 72-97 - This section of brain is from a 6-year-old Hereford cow with unilateral facial paralysis. The majority of those present thought the lesion was representative of an encephalitis. Both rabies and listeriosis were mentioned as possible causes.

Contributor's diagnosis: Listeriosis.

Contributor: Tuskegee Institute.

Case III - A-9005 - This tissue section was taken from an 11-year-old male cat. Most of those present diagnosed the lesion as a pituitary adenoma.

Contributor's diagnosis: Chromophobe adenoma of the pituitary.

Contributor: Animal Medical Center.

Case IV - 30775 - Numerous rabbits were dead or dying. All of these attending the seminar diagnosed the lesions as hepatic and intestinal coccidiosis.

Contributor's diagnosis: Hepatic and intestinal coccidiosis. Contributor: Los Angeles County Veterinarian.

> KENNETH M. AYERS Capt., USAF, VC Veterinary Pathology Division

Registration of a factor posted

Opto 1 - 73-206 - o This tissue is from 7, 2 year old Hereford atter and analog blinds one, hypermentitivity, a tagge slog, and they present for love, intermittent poriods of time before death. This was the fifth seismal out if a head of 25 to be shallfully affect to

Case H = 73-1197 - A federal wildlife refuge experienced a high death lors of mallard ducks during January 1973. Approximately 30,000 mallards out of a population of 130,000 died during that month. Some Canadian goese also died during this period of time.

Case III - 7350-1 - This tissue is from an incidental finding in a bovine foles aborted during the last trimester of prognancy.

Case IV - 73-834 - This tissue section is from a 3-year-old main deg.

PHILIP W. BLUMFR Capt., USAF, VG Votesinary Pethotogy Division

## Results AFIP Wednesday Slide Conference 2 January 1974

Please excuse the delay in these results. The holiday schedules and leaves of many of our staff disrupted the normal flow of events for our 2 Jan. 1974 Wednesday Conference. It evidently disrupted the schedules of other participants also (attendance at 2 Jan. Conference = 3 from AFIP, 1 from outside AFIP).

Case I - 73-286 - This tissue is from a 2-year-old Hereford steer showing blindness, hypersensitivity, staggering, and then prostation for long intermittent periods of time before death. This was the fifth animal out of a herd of 25 to be similarly affected.

Contributor's diagnosis: Policencephalomalacia.

Case II - 73-1197 - A federal wildlife refuge experienced a high death loss of mallard ducks during January 1973. Approximately 30,000 mallards out of a population of 130,000 died during that month. Some Canadian geese also died during this period of time.

Contributor's diagnosis: Duck virus enteritis.

Case III - 7350-1 - This tissue is from an incidental finding in a bovine fetus aborted during the last trimester of pregnancy.

Contributor's diagnosis: Epithelial inclusion in the heart.

Ref.: Jolly, R. D.: Epithelial inclusions of a bovine heart. Can. J. Comp. Med. Vet. Sci. 29: 232-233, 1965.

Case IV - 73-834 - This tissue section is from a 3-year-old male dog. Contributor's diagnosis: Squamous cell carcinoma.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division 1115 %

APTE Continue to the Continue to 9 June 1974

Case 1 - 82694 - A unitare made Samericas peofficed arrived and permanent content on 11 Japhury 1973. The unitarity was samerican at 20 Japany 1977 - to bight time the High 11.2, 5/150 and 15 to 15

Case 11 - 73-3803 - Six out of ten pupples in a litter died suct only at one week of age.

Case III - This tissue is from a 3-4 year old Rhesus monkey which exhibited severe dyspara and died within 24 hours after receiving a letter dose of ionizing radiation. Other monkeys receiving the same dose of not show a comparable response.

Case IV - A73-366-3 - Tiesue from an aged primate.

PHILIP W. BLUMER Capt., USAT, VC Vetarinary Principal Pivition

# Results AFIP Wednesday Slide Conference 9 January 1974

Case I - S2694 - A mature male marmoset arrived at a primate research center on 11 January 1973 and was sacrificed 19 days later. The majority of those present diagnosed the lesion as a multifocal necrotizing splenitis and noted the presence of intranuclear inclusion bodies. Most thought it to be due to a Herpesvirus T infection.

Contributor's diagnosis: Focal splenic necrosis with intranuclear inclusion bodies, caused by Herpesvirus T.

Contributor: Charles Davis Foundation.

Case II - 73-3803 - Six of 10 puppies in a litter died suddenly at one week of age. Most of those present at the conference diagnosed the lesions as an acute necrotizing pneumonia, nephritis, and hepatitis due to Herpesvirus canis. Contributor's diagnosis: Herpes infection. Electron microscopic examination of glomeruli revealed herpes-like viruses within endothelial cells. Contributor: Animal Disease Lab., Tennessee Dept. of Agriculture.

Case III - 69-192 - Tissue from a 3-4 year old rhesus monkey with severe dyspnea. The animal died 24 hours after receiving a lethal dose of ionizing raulation. Other monkeys receiving the same dose did not show a comparable response. The cystic lesion was diagnosed by the attendees as a hydatid cyst while most felt the lung changes were characteristic of bronchopneumonia as the result of aspiration.

Contributor's diagnosis: Pulmonary hydatid disease and proliferative interstitial pneumonia, giant cell type, etiology probably rubeola virus. Contributor: AFRRI.

Case IV - A73-366-3 - Tissue from a primate. This was diagnosed by all present at the seminar as amyloidosis.

Contributor's diagnosis: Splenic amyloidosis.

Contributor: Brooks AFB, Texas.

LTC, VC, USA

Veterinary Pathology Division

4/11: 111

#### Histories AFIP Wednesday Slide Conference 16 January 1974

Case I - 6226-1 - A 2-year-old male Albino corn snake was found dead at the Baltimore Zoo.

Case II - 6531-23 - A 9-year-old spayed female Welch terrier had a mass in the left frontal sinus.

Case III - 2526-72 - Tissue from a female boxer dog.

Case IV - 1426-73 - This tissue is from a 4-1/2 week old Hubbard broiler chicken, one of a flock of 40,000 which had a rapid increase in mortality with low morbidity over a 7-9 day period.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

#### Results AFIP Wednesday Slide Conference 16 January 1973

Case I - 6226-1 - A 2-year-old male Albino corn snake was found dead at the Baltimore Zoo.

Contributor's diagnosis: Visceral gout.

Much of the discussion was concerned with the unusual parenchymal location of the tophi rather than the more frequently seen serosal location. Contributor: Johns Hopkins University.

Ref.: Appleby, E. C.: Some cases of gout in reptiles. J. Pathol. & Bacteriol. 80: 427-430, 1960.

Case II - 6531-23 - A 9-year-old spayed female Welch terrier had a mass in the left frontal sinus.

Contributor's diagnosis: Muco-epidermoid carcinoma.

A lively discussion by the participants revolved around the terminology of the neoplasm. Adenosquamous carcinoma was mentioned as an alternative name. The site of origin was also pondered.

Contributor: Johns Hopkins University.

Ref.: Koestner, A., and Buerger, L.: Primary neoplasms of the salivary glands in animals compared to similar tumors in man. Pathol. Vet. 2: 201-226, 1965.

Case III - 2526-72 - Tissue from a female Boxer dog.

Contributor's diagnosis: Ulcerative colitis.

Contributor: Oregon State University.

Ref.: Sander, C. H., and Langham, R. F.: Canine histiocytic ulcerative colitis. Arch. Pathol. 85: 94-100, 1968.

Case IV - 1426-73 - Tissue from a 4-1/2 week old Hubbard broiler chicken, one of a flock of 40,000 which had a rapid increase in mortality with low morbidity over a 7-9 day period.

Contributor's diagnosis: Inclusion body hepatitis.

Additional information about the gross appearance of the birds was furnished. The birds were pale. The livers were enlarged and appeared fatty with numerous pinpoint red foci.

Contributor: Oregon State University.

Ref.: Pettit, J. R., and Carlson, H. C.: Inclusion-body hepatitis in broiler chickens. Avian Dis. 16: 858-863, 1972.

\*\*\*An error in transcription was made on the Histories for the Conference on 6 February 1974. Case III should be 72-239 rather than 72-97.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

#### Histories AFIP Wednesday Slide Conference 23 January 1974

Case I - 2146-72 - Tissue from a calico cat. Many of the peripheral lymph nodes and spleen were enlarged.

Case II - 40831 - Swollen liver and ascites were reported from this puppy which died acutely.

Case III - 71-884 - Tissue taken at slaughter from a 6-month-old lamb. This flock containing 2,500 ewes annually experienced a 90% morbidity and 10% mortality of lambs during the first 3 weeks of life in spite of vigorous therapy.

Case IV - 43140 - Tissue from a 1-1/2 year old male Shetland pony cross.

The animal became ill with anorexia, fever, cyanosis, and rapid pulse
12 days after beginning an experimental manipulation.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

#### Results AFIP Modnesday Slide Conference 23 January 1974

Case I - 2146-72 - Tissue from a calico cat. Many of the peripheral lymph nodes and spleen were enlarged.

Contributor's Diagnosis: Plasma coll myeloma. According to the contributor the involved lymph nodes were composed of solid sheets of plasma cells.

The opinions of the attending participants ranged between hematopoietic neoplasm, myeloproliferative disorder, and hyperplasia.

Contributor: Oregon State University.

Case II - 40831 - Swollen liver and ascites were reported from this puppy which died acutely. Contributor's diagnosis: Infectious canine hepatitis and canine distemper. Contributor: County of Los Angeles.

Case III - 71-884 - Tissue taken at slaughter from a 6-month-old lamb. This flock containing 2500 ewes annually experienced a 90% morbidity and 10% mortality of lambs during the first 3 weeks of life in spite of vigorous therapy. Contributor's comments: Pasteurella spp. and Mycoplasma spp. were cultured from the lungs of 10 permates when they were necropsied during the first 3 weeks of life. Lesions in tissue submitted represent a uniform response of the lung to injury.

Contributor: University of Nebraska.

Ref .: Jericho, K. W .: Intrapulmonary lymphoid tissue in pigs. Vet. Bull. 36: 687-707, 1966.

Jericho, K. W. F.: Pathogenesis of pneumonia in pigs. Vet. Res. 82: 507-517, 1968.

Case IV - 43140 - Tissue from a 11/2-year-old male Shetland pony cross. The animal became ill with anorexia, fever, cyanosis, and rapid pulse 12 days after beginning an experimental manipulation. Contributor's diagnosis: Hypervitaminosis D. The pony was fed 8 million units of Vit. D daily for 2 weeks.

Contributor: Cornell University. Ref.: Capen, C. C., et al.: Pathology of Hypervitaminosis D in cattle. Path. Vet. 3: 350-378, 1966.

> Grant, R. A., et al.: Prolonged chemical and histochemical changes associated with widespread calcification of soft tissues following brief acute calciferol intoxication. Brit. J. Exp. Path. 44: 220, 1963. MICHAEL A. STECHEL

LTC, VC, USA

#### Histories AFIP Wednesday Slide Conference 30 January 1974

Case I - 11875 - A rhesus monkey was inoculated intravenously with an inoculum containing approximately 107 infectious particles. Death occurred about 96 hours postinoculation.

Case II - K73-1015 - Two inch speckled trout (brook trout) fingerlings (Salvelinus fortinalis). Mortality began 5 weeks ago. Six to ten dead fish were found each day but a peak of 50 in a day was seen last week. Rainbow trout on the same farm have no significant mortality.

Case III - 73-1013 - Abdominal mass from female C3H breeder mouse.

Pregnancy status is now known.

Case IV - 71-767 - Section of ileum from a gnotobiotic calf killed 45 hours after the onset of diarrhea. The calf was 78 hours old.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

## Results AFIP Wednesday Slide Conference 30 January 1974

Case I - 11875 - A rhesus monkey was inoculated intravenously with an inoculum containing approximately 10 infectious particles. Death occurred about 96 hours postinoculation.

Contributor's diagnosis: Multifocal necrotizing vasculitis of the nares and testicle with coagulation necrosis in the liver and testicle. Etiology Rickettsia rickettsii (Rocky Mountain spotted fever).

Contributor: USAMRIID, Ft. Detrick.

Case II - K73-1015 - Two inch speckled trout (brook trout) fingerlings (Salvelinus fortinalis). Mortality began 5 weeks ago. Six to ten dead fish were found each day but a peak of 50 in a day was seen last week. Rainbow trout on the same farm have no significant mortality. Contributor's diagnosis: Corynebacterial kidney disease.

Comments: Gross lesions included numerous white foci in the viscera (liver and kidney, primarily).

Attending participants' diagnoses covered a wide range.

Contributor: Ontario Ministry of Agriculture.

Ref.: Bullock, G. L., and McLaughlin, J. J. A.: Advances in knowledge concerning bacterio-pathogenic to fishes (1954-1968). In A Symposium on Diseases of Fishes and Shellfishes. Edited by S. F. Snieszko, American Fisheries Society, Washington, D. C., 1970, 238.

Case III - 73-1013 - Abdominal mass from female C<sub>3</sub>H breeder mouse.

Pregnancy status is not known.

Contributor's diagnosis: Ovarian teratoma.

Contributor: Bionetics at Ft. Detrick.

Ref.: Stevens, L. C.: The biology of teratomas.

Advan. Morphogenesis, 1967: 1-31.

Case IV - 71-767 - Section of ileum from a gnotobiotic calf killed 45 hours after the onset of diarrhea. The calf was 78 hours old. Contributor's diagnosis: Corona calf diarrhea virus infection. Contributor: University of Nebraska.

Ref.: Mebus, C. A., Stair, E. L., Rhodes, M. B., and
Twichaus: Pathology of neonatal calf diarrhea induced
by a Coronavirus-like agent. Vet. Path. 10: 45-64, 1973.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division 1

#### Histories AFIP Wednesday Slide Conference 6 February 1974

HAVE All

Case I - 73-0865-2 - Tissue from a 3-week-old male, Yorkshire cross pig. Littermates of this pig and other suckling pigs were similarly affected. Many of the pigs died.

Case II - T-824-1 - Tissue obtained via ovariohysterectomy performed in February 1973. The bitch, a 1-1/2 year old Malemute, had whelped in November 1972.

Case III - 72-97 - Tissue from a 6-week-old foal.

<u>Case IV - 73-366 -</u> Seven of 7 redhead parrots in the same cage died at irregular intervals with no clinical signs. Lesions seen at necropsy included swollen livers with pinpoint yellow foci diffusely scattered throughout the parenchyma.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

## Results AFIP Wednesday Slide Conference 6 February 1974

Case I - 73-0865-2 - Tissue from a 3-week-old male, Yorkshire cross pig. Littermates of this pig and other suckling pigs were similarly affected. Many of the pigs died.

Contributor's diagnosis: Inclusion body rhinitis.

Contributor: Ohio State University.

Case II - T-824-1 - Tissue obtained via ovariohysterectomy performed in Feburary 1973. The bitch, a 1-1/2 year old Malemute, had whelped in November 1972.

Contributor's diagnosis: Subinvolution of placental sites.

Contributor: Ohio State University.

Ref.: Glenn, B. L.: Subinvolution of placental sites in the bitch. Gaines Veterinary Symposium, October 1968.

Case III - 72-97 - Tissue from a 6-week-old foal.

Contributor's diagnosis: Joint ill (Actinobacillus equuli).

Contributor: Tuskegee Institute.

Case IV - 73-366 - Seven of 7 redhead parrots in the same cage died at irregular intervals with no clinical signs. Lesions seen at necropsy included swollen livers with pinpoint yellow foci diffusely scattered throughout the parenchyma.

Contributor's diagnosis: Necrosis, acute, focal, disseminated, severe, liver, due to Salmonella infection.

Contributor: University of Arizona.

Ref.: Petrack, M. L., Ed.: <u>Diseases of Cage and Aviary Birds</u>, Lea and Febiger, Philadelphia, Pa., 1969: 361 and 364-365.

Mulail a Stedham

LTC, VC, USA

#### Histories AFIP Wednesday Slide Conference 13 February 1974

Case I - 27307 - A 500 pound calf was acutely ill 3 hours after having been observed normal. The calf was unable to rise, blind, and groaning. Necropsy revealed 2+ urine sugar, "hemorrhagic enteritis", renal congestion, epicardial petechia, and edematous congested lungs. The veterinarian thought the cerebral cortex was soft and reduced in thickness.

Case II - 4652 - Two thousand weanling C57Bl mice were obtained for a cancer study. Many were sick. About 100 died in the first 3 days after arrival. At necropsy lesions were found only in the lungs.

Case III - 4765 - A 13-year-old Boston terrier had signs suggestive of urinary or digestive tract disease. The tissue was obtained by exploratory surgery.

Case IV - 72-339 - A juvenile cebus monkey became moribund during its quarantine and conditioning period.

MICHAEL A. STEDHAM

LTC, VC, USA

RCG WI

### APIP Wednesday Slide Conference 13 February 1974

Case T - 22307 - A 500 pound calf was acutely ill 3 hours after having been observed normal. The calf was unable to rise, blind, and groaning. Necropsy revealed 2+ urise sugar, "hemorrhagic enteritis", renal congestion, epicardial petechia, and edematous congested lungs. The veterinarian thought the cerebral cortex was soft and reduced in thickness.

Contributor's diagnosis: Haemophilus septicemia.

Comments: The brain from this animal had typical H. somnus
vasculitis and infarction. The vasculitis occurs in many organs
as in this case.

Some of the attending participants considered a hypersensitivity pucumonitis or pneumonia. Contributor: Oklahoma State University.

Ref.: Panciera, R. V., et al.: Observations on septicemin of cattle caused by a <u>Haemophilus</u>-like organism. Path. Vet. 5: 212-226, 1968.

Dierks, R. E., et al.: Epizootiology and pathogenesis of Hemophilus somnus infection. J.A.V.M.A. 163: 866-869, 1973.

Case II - 4652 - Two thousand wearling C57Bl mice were obtained for a cancer study. Many were sick. About 100 died in the first 3 days after arrival. At necropsy lesions were found only in the lungs.

Contributor's diagnosis: Sendai virus infection.

Comments: Pooled serum from sick mice was found to have a 1:160 titer for Sendai and was negative for other viruses affecting the respiratory tract. The lung lesions are typical of Sendai virus infection.

Several of the attendees were in agreement with the contributor. Two went as far as naming the virus. Contributor: University of Alabams.

Ref.: Nelson, J. B.: Respiratory infections of rats and mice with emphasis on indigenous mycoplasms.

IN: Pathology of Laboratory Kats and Mice, Cotchin, E. and Roc, F. J. C., Eds., Blackwell Scientific Publications, Oxford, 1967: 259-239.

### 13 Feb 174

Case IXI - 4765 - A 13-year-old Boston terrier had signs suggestive of urinary or digestive tract disease. The tissue was obtained by exploratory surgery.

Contributor's diagnosis: Henatoms.

Comments: Apparently only the liver was involved. The tumor weighed 2-1/2 pounds.

Contributor: University of Alabama.

Case IV - 72-339 - A juvenile cebus monkey became moribund during its quarantine and conditioning period.

Contributor's diagnosis: 1. Verminous enteritis, etiology Molineus torulosis, small intestine, monkey.

2. Candidiasis, severe, esophagus.

Contributor: Letterman Army Institute of Research.

Ref.: Brach, M., et al.: Pathogenic properties of Molineus
torulosis in Capuchin monkeys, Cebus apella.

Lab. Anim. Sci. 23: 360-365, 1973.

MICHAEL A. STEDHAM

LTC, VC, USA

## Histories AFIP Wednesday Slide Conference 20 February 1974

Case I - 39845 - This lesion is from the skin of the face of a dog.

Case II - 72-332 - A 3-month-old bulldog became progressively weaker and died. The mucous membranes were interic.

Case III - K73-1108 - These tissues are from a common white sucker (Catostomus commersoni) caught during a survey in the Thames River Drainage (Ontario).

Case IV - 74-2463 - This tissue is from an adult pony.

MICHAEL A. STEDHAM

LTC, VC, USA

-216-55

The first and the second of the second of the discussion with the fact of a day, the second of the discussion with a second of the discussion with a second of the discussion of the second of the sec

Come 11 - 72-337 - A 3-mapub-old believe become programmively suches and died. The nations to because the interior disputeing industries caning hopoticies.

Labort play: Turbugue fortisties.

Gree lff - K73-1108 - These tissues are from a common white nuclear (Catestonia commercial) caught during a survey to the lineaus River draining (Ontario).

Contributor's dispussion Hymosperidiosis.

Contributor's dispussion Himistry of Apriculture and Food.

Contributor's diagnosis: Fibroelastosis with mineralization.

Comments: A lively discussion including abundant reference quoting uns generated by this case. Most of the discussants believed the legion to be influencery, probably caused by Strongyre larvee.

A coarch of the standard texts revealed fraguent meetics of lesions in the proximal sorts and valves but no reference specifically to ventricular endocardial lesions in capine strongylesis. A recent paper contioned endocardial lesions in the left ventricle but they were somewhat more nodular.

One of the discussants commented that fibroelsstorie should have more prominent clostic fibers (our Movet's postenhama stain of a decolorised Han side revealed a modern crosset of clostic fibers).

Pechaps the east important diagnostic clar is not available of this time, that is, whether the lation was diffuse, thus favories fibroakstoris or souther diffuse process, or whether the lasion was focal, sultifocal, or linear, thus favories a parabitic cause. We will ask the contributor to furnish that information, if available.

Contributor: Duiversity of Misconnis.

Reference: Little, et al. :Gerrorespinal Lonatediasis of Equidac.

J.A.V.M.A. 100: 140), May 15, 1572.

MICHAEL A. STEDRAM

tre, ve, usa

Voterfamily Pathology Division

## Histories AFIP Wednesday Slide Conference 27 February 1974

FAD: 1:

Case 1 - 73-3-39 - This Especia iron, one of 30 cats to a household,

Case H - 20779 - This tissue contains an incidental finding in a 15-year-old male miniature Pinscher.

Case III - 73-S-286 - A large number of guinea pigs died shortly after having bilateral ovariectomies. Necropsy examination revealed a fibrinous peritonitis.

Case IV - 73-S-228 - This tissue is from an 8-month-old domestic short haired cat with bilateral swellings of the first right and left mammae.

Michael a Straham

MICHAEL A. STEL

LTC, VC, USA

18 CC

Case 1 - 73-8-39 - This tissue is from one of 30 cats in a household.

Contributor's diagnosis: Feline infactions peritoritie.
Comments: Additional data on the cats were that several had
respiratory disease, and some developed pendulous abdomens.

Two of the discussants saw Toxoplasma organisms in addition to the characteristic lesions of FIP.

Contributor: University of Wisconsin.

Reference: Ingram, P. L.: Feline infectious peritonitis and its differential diagnosis. J. Small Anim. Pract. 12: 301-306, 1971.

Case II - 20779 - This tissue contains an incidental finding in a 15-year-old male miniature Pinscher.

Contributor's diagnosis: Amyloidosis, pulmonary, primary.

Commerts: A thorough search by the contributor failed to detect significant extrapulmonary amyloid. A Congo red stain and polarization confirmed the amyloid. In addition, Thioflavin T staining and electron microscopy were performed by the contributor.

Contributor: U. S. Army Medical Research & Nutrition Lab., Denver.

Case III - 73-S-286 - A large number of guinea pigs died shortly after having bilateral ovariectomies. Necropsy examination revealed a fibrinous peritonitis.

Contributor's disenssis: Diplococcus pneumoniae hepatitis associated with a viral hepatitis.

Comments: The Cowdry Type-A intranuclear inclusion bodies are believed to be the result of guinea pig Herpes-like virus infection. Electron microscopy revealed viral particles morphologically similar to the herpesvirus group.

Contributor: Hershey Medical Center.

Reference: Hsiung, G. D., Kaplow, L. S., and Booss, J.: Herpes virus infection of guinea pigs. I. Isolation, characterization and pathogenicity. Amer. J. Epidemiol. 93: 298-307, 1971.

Case IV - 73-S-228 - This tissue is from an 8-month-old domestic short haired cat with bilateral swellings of the first right and left mammae.

Contributor's diagnosis: Fibroadenoma of the mammary gland.

Comments: The almost unanimous opinion of the discussants was that this lesion was a hyperplasia, probably related to storoid stimulation. A consultation from our resident mammary expert yielded the opinion that although the lesion would possibly be referred to as "fibroadenomatous" it represented hyperplasia rather than heaplasia.

Contributor: Hershey Medical Conter.

STEEREL A. STEPHAN

LTC, VC, USA

HAUS ALL

#### #interior /#IV Use-ruder Stide Conference 6 March 1974

Case 1 - 73-6572-1 - A group of 4-5 month old pigs become very eatherity over a period of 3-4 weeks. Initially, the signs were associated with a chronic solst cough that was thresponsive to treatment. After a time the saimals became anoractic and deaths occurred. They had been fed a protein supplement intended for use in cattle.

for 5 days and was found dead on the morning of the 6th day.

Case Ill - S-2651 - A mature female owl monkey, Actus trivirgatus, arrived at the laboratory on 2 November 1972. She was found send on 30 December 1972.

Come IV - CK 73-163 - Tissue from an RIF-free chicken maintained in an isolator as a breeder, showing decreased egg production and fertility.

MICHAEL A. SIE

LIC, VC, USA

Veterinary Pathology Division

\*A\*Note --- Ouing to the TA" meeting there will be no conference on 13 March 1974.

## AFIP Wednesday Slide Conference 6 March 1974

Case I - 73-6572-1 - A group of 4-5 month old pigs became very unthrifty over a period of 3-4 weeks. Initially, the signs were associated with a chronic moist cough that was unresponsive to treatment. After a time the animals became anorectic and deaths occurred. They had been fed a protein supplement intended for use in cattle.

Contributor's diagnosis: Gossypol toxicity.

Contributor: Kansas State University.

Case II - 72-965 - This animal was orally dosed with

for 5 days and was found dead on the morning of the 6th day.

Contributor's diagnosis: Midzonal necrosis.

<u>Comments:</u> This case was submitted for discussion. The pig had been dosed with aflatoxin: It was thought that the dose was excessive and contributed to or caused death before more classic lesions developed.

Contributor: Kansas State University.

Case III - S-2651 - A mature female owl monkey, Actus trivingatus, arrived at the laboratory on 2 Nov. 1972. She was found dead on 30 Dec. 1972. Contributor's diagnosis: Focal purulent inflammation of the liver, with sharply delineated colonies of bacteria.

Comments: Pasteurella (or Yersinia) pseudotuberculosis was isolated from the liver and heart blood at the time of necropsy.

Contributor: C. L. Davis Foundation.

Case IV - CK 73-163 - Tissue from an RIF-free chicken maintained in an isolator as a breeder, showing decreased egg production and fertility.

Contributor's diagnosis: Fatty liver syndrome in caged laying hens.

Comments: Several discussants considered a microbial cause to be likely but neither organisms nor viral inclusions were detected.

Contributor: NIH, Comparative Pathology.

Reference: Peckham, M. C.: Vices and Miscellaneous Diseases. In <u>Diseases</u>
of Poultry, 6th ed., Edited by M. S. Hofstad, Iowa State
University Press, Ames, Iowa, 1972, 1055-1112.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

\*\*\*\*Note ---Owing to the IAP meeting there will be no conference on 13 March 1974. HAUR MI

### AFIP Wednesday Slide Conference 20 Harch 1974

Casa I - 22985 - An aged sow is good condition on ante-mortem inspection. At postmortem inspection the splenn was 7 o. 8 times normal size and very firm. The liver was enlarged and firm.

Case II - 15449 - 2-month-old chicken. At postworten exemina-

Care 111 - \$73-142 - A 5 cm. diameter lesion, which had been present for about 2 years, was surgically removed from the right check of a 15-year-old male poodle.

Care 1V - 22292 - Isolated occurrence of illness in a feedlot steet. Initial examination revealed a temperature of 102°F and viral signs essentially normal. The head was permistently turned to the right, the calf fell on the right side. At postmortem examination a hencryhagic lerion was seen in the pontine area and vessels of the pia-areamold were engaged.

HICHARL A. STEDBAR

LTC, VC, USA

Results AFIP Wednesday Slide Conference 20 March 1974

Case I - 22985 - An aged sow in good condition on ante-mortem inspection. At post-mortem the spleen was 7 or 8 times normal size and very firm. The liver was also enlarged and firm.

Contributor's diagnosis: Chronic granulomatous disease of swine.

Contributor: U.S.D.A.

Reference: Forbus, W., and Davis, C.: A chronic granulomatous disease of swine with striking resemblance to Hodgkins disease. Am. J. Path. 22: 35-67, 1946.

Case II - 72-965 - 2-month-old chicken. At postmortem examination thickened skin anterior to the breast muscle was noted. Contributor's diagnosis: Neurofibroma. Contributor: U.S.D.A.

Case III - S73-142 - A 5 cm diameter lesion which had been present for about 2 years was surgically removed from the right cheek of a 15-year-old male poodle.

Contributor's diagnosis: Sebaceous adenocarcinoma.

Contributor: Food and Drug Administration.

Case IV - 22292 - Isolated occurrence of illness in a feedlot steer. Initial examination revealed a temperature of 102°F and vital signs essentially normal. The head was persistently turned to the right, the calf fell on the right side. At postmortem examination a hemorrhagic lesion was seen in the pontine area and vessels of the pia-arachnoid were engorged.

Contributor's diagnosis: Lesion the result of larval migration of Hypoderma

lineatum.

Comment: Hypoderma lineatum larva recovered from meninges of ventrolateral cerebellum.

Contributor: Oklahoma State University.

### AFIP Wednesday Slide Conference 27 March 1974

- Case I 0-965 This tircus was removed from the submandibular area of a 16-year-old feasle poodle. Five years earlier a complete mastering had been performed for multiple mixed mammary timers which also involved the unguinal lymph nodes. At that time a small (about 1 cm. diameter) lipons was removed from the submandibular region.
  - of the guns of a 5-year-old downstic short hall cat.
- pig was being used in a study to evaluate the immunological response to cutaneous infection. Unexpected deaths countried in the created group.
- case IV 73-226 This tissue is from a 5-month-old miniature pig which was sacrificed at the termination of an experiment involving nuclear imaging radiopharmacouticals.

MIGHAEL A. STEDEAN

LTC, VC, USA

## Results AFIP Wednesday Slide Conference 27 March 1974

Case I - 0-965 - This tissue was removed from the submandibular area of a 16-year-old female poodle. Five years earlier a complete mastectomy had been performed for multiple mixed mammary tumors which also involved the unguinal lymph nodes. At that time a small (about 1 cm diameter) lipoma was removed from the submandibular region.

Contributor's diagnosis: Liposarcoma.

Comments: Most of the attending participants supported liposarcoma or other sarcoma.

Contributor: Pfizer, Inc.

Case II - 1905-A - This tissue was removed from an ulcerated area of the gums of a 5-year-old domestic short hair cat.

Contributor's diagnosis: Giant cell epulis.

Comments: Several comments (critical) by attendees were noted regarding the quality of their microslides, for which the contributor tendered his apoligies. It was felt worth while, however, to include this entity which is rarely seen in cats although commonly seen in dogs.

Reference: Gorlin, R. J., Barron, C. N., Chandhry, A. P. and Clark, J. J.: The Oral and Pharyngeal Pathology of Domestic Animals.

A Study of 487 Cases. Am. J. Vet. Res. 20: 1032-1061, 1959.

Contributor: National Zoological Park.

Case III - 71-121 - This 4-month-old male Moen-Chase guinea pig was being used in a study to evaluate the immunological response to cutaneous infection. Unexpected deaths occurred in the treated group.

Contributor's diagnosis: 1. Cytomegalovirus disease, disseminated, guinea pig. Giant cell pneumonitis and vasculitis, etiology probably cytomegalovirus,

lung, guinea pig.

Comments: This guinea pig had been treated with cyclophosphamide (cytoxan) at 20 mg/kg per day for the 3-week period prior to death. In addition the group containing this animal and others which had similar signs and lesions was

27 mar 77

subjected to an additional stress of an additional stress of an unplanned overnight drop in temperature to 55°F when the heating unit failed.

Contributor: Letterman Army Institute of Research.

Case IV - 73-226 - This tissue is from a 5-month-old miniature pig which was sacrificed at the termination of an experiment involving nuclear imaging radiopharmaceuticals.

Contributor's diagnosis: Pericarditis, organized, partially adhesive, probably a sequel of Mycoplasma hyorhinis infection.

References: Roberts, E. D., Switzer, W. P., and Ramsey, F. K.:

Pathology of the Visceral Organs of Swine Inoculated with

Mycoplasma hyorhinis. Am. J. Vet. Res. 24: 9-18, 1963.

Ross, R.: Pathogenicity of Swine Mycoplasmas. Ann. N. Y. Acad. Sci. 225: 347-368, 1973.

Contributor: Armed Forces Radiobiology Research Institute.

MICHAEL A. STEDHAM

LTC, VC, USA

Veterinary Pathology Division

P.S. - Case II on 3 April 1974 is a ewe.

HIDE

### AFTP Endnesday Slids Conterance 3 April 1974

Cons 1 - 73532-6 (2 clides) - Tissue from an 800 peach steer found morrhand 5 days steer experimental manipulation of the diet.

Phalaris

Case II - 738335 - This animal had a history of feeding on Marding grass. Clinical signs consisted of head bobbing and tonic and clonic spasms when the animal was exerted. A striking gray-graen discoloration of gray metter was seen. It began at the thalamus and extended posteriorly to involve the midbrain, pons, and medulla.

Case III - 730162 - This soult make cat was admitted to a clinic exhibiting dystaca and nevers depression. The cat had been gagging and had discense. Nofflee heart sounds and hersi respiratory squad were revealed by mascuitation. Radiographs revealed fluid in the thorax.

Case IV . 73-1849 - One year old dear with an illness of 4 days. Signs and symptoms were reported as massl and ocular discharge and weakness.

MICHAEL A. STEDHAM

Winten 16 Steather

LTC, VC, USA

10 X

## Results AFIP Wednesday Slide Conference 3 April 1974

Case I - 73532-6 (2 slides) - Tissue from an 800 pound steer found moribund 3 days after experimental manipulation of the diet.

Contributor's diagnosis: Mycotic rumenitis following engorgement with grain.

Contributor: National Animal Disease Center, Ames, Iowa.

Case II - 73N335 - This animal had a history of feeding on Harding grass. Clinical signs consisted of head bobbing and tonic and clonic spasms when the animal was exerted. A striking gray-green discoloration of gray matter was seen. It began at the thalamus and extended posteriorly to involve the midbrain, pons, and medulla.

Contributor's diagnosis: Neuronal pigmentation compatible with Phalaris toxicity. Contributor: University of California, Davis.

Reference: Jubb, and Kennedy: Pathology of Domestic Animals, 2nd Ed., Vol. 2, 1970, p. 387.

Case III - 73-162 - This adult male cat was admitted to a clinic exhibiting dyspnea and severe depression. The cat had been gagging and had diarrhea. Muffled heart sounds and harsh respiratory sounds were revealed by auscultation. Radiographs revealed fluid in the thorax.

Contributor's diagnosis: Biliary hyperplasia, hepatic fibrosis, and chronic cholangitis, liver, chronic cholecystitis, gallbladder.

Comments: At necropsy one lobe of the liver, the attached gallbladder and much of the greater omentum were situated in the thorax by virtue of a small diaphragmatic hernia. The displaced lobe was yellow and very hard. The tissue bordering the defect in the diaphragm was thick indicating chronicity. The remainder of the liver was situated in the abdominal cavity and appeared normal grossly. Microscopically this portion of the liver contained prominent periportal infiltrations of lymphocytes and mild bile stasis.

After the presentation of the case several attending participants emitted howls of anguish when the contributing diagnosis was read. Although admitting to the presence of fibrosis and biliary hyperplasia, they adamantly claimed that a bile duct carcinoma also was present. Especially convincing evidence, they stated, was the presence of "neoplastie" ductular structures in the wall of the gallbladder. Some of these even separated the smooth muscle. Their point appears well taken.

We are awaiting consultation from our hepatic branch for further confirmation or refutation. We will advise you of their opinion in future correspondence. Contributor: University of California, Davis. Case IV - 73-1840 - One year old deer with an illness of 4 days. Signs and symptoms were reported as nasal and ocular discharge and weakness.

Contributor's diagnosis: Epizootic hemorrhagic disease, with a differential of bluetongue, and malignant catarrhal fever.

Comments: In addition to histopathology extensive laboratory work was performed in an attempt to reach a diagnosis in this case. Isolation attempts were negative for sporadic bovine encephalomyelitis, bluetongue, and epizootic hemorrhagic disease viruses. Electron microscopy of hepatocytes revealed cytoplasmic virus-like particles measuring 50-60 nanometers, which would tend to discount a herpes infection (malignant catarrhal fever).

Many of the attending participants considered the microscopic lesions, especially the liver infiltrates, to be more compatible with malignant catarrhal fever.

Contributor: State of Tennesse, Dept. of Agriculture.

References: Stair, E. L., et al.: Spontaneous Bluetongue in Texas White-Tailed Deer. Path. Vet. 5: 164-173, 1968.

> Clark, K. A., et al.: Malignant Catarrhal Fever in Texas Cervids. J. Wildlife Dis. 6: 376-383, 1970.

Tsai, K., and Karstad, L.: The Pathogenesis of Epizootic Hemorrhagic Disease of Deer. An Electron Microscopic Study. Am. J. Pathol. 70: 379-400, 1973.

> MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

HADE All

AFIP Wednesday Slide Conference 10 April 1974

Case T - 54803 - Tissue from a 2-year-old which had an arched back and weakness.

Case II - 763-72 - One of several cutaneous nodules from a horse.

Case Ill - 425-73 - This sheep was found dead in its pen. It had received several injections of bluetongue virus 3 months prior to death. A similarly injected penuace was healthy.

Case IV - 73-1192 - Mediastinul mass in a 9-year-eld dog.

MICHAEL A. STEDRAM

LTC, VC, USA

#### J. chulle AFIP Wednesday Shide Conference 10 April 1-174

Case I - 54803 - Tissue from a 2-year-old rat which is to weeked back and weathness.

Contributor's diagnosis: Renal osteodystrophy.

Comments: The lissue was from a ral not a cat as sin-Lue history originally sent out.

Other microscopic lesions included severe chronic relitial nephritis, slight parathyroid hyperplasis, and metastatic calcification in various sites. Contributor: Merck, Sharp & Dohme/Research Labor:

Case H - 763-72 - One of several cutaneous nodules far horse.

Contributor's diagnosis: Cutaneous habronemiasis.

Comments: The discussion included the possibilities of a diagnoses in view of the absence of larvae in the submitted lesion, e. r. "coal hypersensi-- Sutaneous tivity reactions to other agents (Tabanid or mosquite bitmanincyrosis".

Completion: Edgewood Arxenal.

Reference: Altera and Clark: Equine Cutanoons Maston Vct. Path., 7: 43-55, 1970.

Case IU - 425-73 - This shoep was found dead in its per had a nelved naveral injections of bhotongue views 3 mends o in to a . A similarly injusted personate was healthy.

Contributor's diagnosis: Enterotoremia.

Comments: The hazards of differentiating postmortem for ante-mortem renal changes were discussed and the need for clinical no thirdings in support of this diagnosis was mentioned. Contributor: Edgewood Arsenal.

brical pathologic

### RESULTS 10 APRTY

Care IV a 73-1192 - Medicatine summa to a 9-year old for

Contributor's diagnosts: Parathyrold admirta.

Contributed State of Tennescer, Dopt. of Agriculture.

Aortic Body Tumers. Comparison with T. sues of Thyroid and Parathyroid Origin. Vet. Path. 9: 16, 129, 1972.

Boquist, L.: Follicles in Human Parathyre: Glands. Lab. Invest. 23: 313-320, March 1973.

MICHAEL A. LEDHAM

LTC, VC, USA

AFIP Wednesday Side Conformed HAUE A/ 17 April 1974

Case I - Tissues taken from a pig slaughtered in a Sout' ofrican abattoir.

Grossly the kidneys had multiple small white spots in the parenchyma and capsule.

Case II - 3227 - 5-week-old pathogen free mouse, CD- strain, intranasally instilled with a broth culture containing a large dose of a agent which is a natural pathogen for mice. The mouse died 3 days later.

Case III - 2594 - Same as for #3227 except that this more was killed on the 28th post-infection day.

Case IV - 73-1006 - A surgical specimen from the thire mammary gland of an 11-year-old bitch was roughly spherical and firm.

Case V - 73-6844 - 3 cc. of a product was given to each of 15 calves at 6 p.m. By 7 a.m. the next day 3 calves had acute convi. we signs.

MICHAEL STEDHAM

LTC, VC USA

## Results AFIP Wednesday Slide Conference 17 April 1974

Case I - Tissues taken from a pig slaughtered in a South African abattoir. Grossly the kidneys had multiple small white spots in the arenchyma and capsule.

Contributor's diagnosis: Leptospirosis.

<u>Comments:</u> The contributor furnished transparencies of microslides stained by the Warthin-Starry method. Numerous spirochetal organisms were demonstrated in the tubular lumina and some in the parenchyma. Contributor: Geographic Zoonoses Branch, AFIP.

Case II - 3227 - 5-week-old pathogen free mouse, CD-1 strain, intranasally instilled with a broth culture containing a large dose of an agent which is a natural pathogen for mice. The mouse died 8 days later.

Case III - 2594 - Same as for #3227 except that this mou. e was killed on the 28th post-infection day.

Contributor's diagnosis: Mycoplasma pulmonis infection.

Comments: Each of these mice had been given 10 CFU c: M. pulmonis as part of a study designed to determine the relationships between dose quantity of this agent and the resulting disease in mice. Case #3217 is typical of the "high dose-acute disease" while case #2594 is a dramatic example of the "high dose-chronic disease" described in the reference.

Contributor: University of Alabama, Birmingham.

Reference: Lindsey, J. R., and Cassell, G. H.: Experimental Mycoplasma pulmonis Infection in Pathogen-Free Mice. Am. J. Pathol. 72: 63-90, 1973.

### RESULTS 17 APR 74

Case IV - 73-1006 - A surgical specimen from the thire mammary gland of an 11-year-old bitch was roughly spherical and firm.

Contributor's diagnosis: Osteosarcoma.

Contributor: University of Arizona.

Case V - 73-6844 - 3 cc. of a product was given to each of 15 calves at 6 p.m. By 7 a.m. the next day 3 calves had acute convilsive signs.

Contributor's diagnosis: Acute iron toxicosis.

Comments: Three cc. of an iron injection product contailing 120 mgm. ferric ammonium citrate and 30 mgm. iron peptonate per cc. were given to the calves. Necropsy revealed an acute toxic hepatitis. Themical analysis of the liver revealed 701 and 823 ppm of iron and 427 and 194 ppm of copper. Contributor: South Dakota State University.

LTC, VC, USA

Veterinary Pandogy Division

P.S. The consultation on the controversial liver (Case 13, 3 April) has been received from the Hepatic and Pediatric Branch of the Intuitute. It states, ".....an adenocarcinoma apparently arising from the intrahepatic bile ducts."

F11 15 1

#### Histories AFIP Wednesday Slide Conference 24 April 1974

Case I - 4	1499 - Rat with diarrhea	72 hours after an injection.	
the same of the same of	L22511 - Rat with melens	a. It had been injected prov	iously
inoculation	with an infectious agent.	nite rat dying 7 days after so Similar lesions were obse bdominal lymph nodes, and	rved in the
Case IV -	MS 72-2 - Tissue from	a male mouse 6 or 7 month	s old.
Case V -	the second control of	sion from a 2-year-old mal	e Charles

MICHAEL A. STEDHAM

LTG, VC, USA

# (FSULT) Nistories AFIP Wednesday Slide Conference 24 April 1974

Case I - 4499 - Rat with diarrhea 72 hours after an injection.

Contributor's diagnosis: Necrotizing enteritis.

Comments: The rat had been injected with azoxymethane, an intestinal carcinogen, which is similar in chemical structure to cycasin and methylazoxymethanol.

Contributor: National Cancer Institute.

Reference: Zedeck, et al.: Biochemical and Pathological Effects of Methylazoxymethanol Acetate, a Potent Carcinogen. Cancer Res. 30: 801, 1970.

Case II - L22511 - Rat with melena. It had been injected previously with

Contributor's diagnosis: Well-differentiated colonic adenocarcinoma or adenoma with focus of invasive carcinoma.

Comments: The rat had been injected previously with azoxymethane.

Contributor: National Cancer Institute.

Reference: Ward, et al.: Pathology of Intestinal Neoplasms and Other Lesions in Rats Emposed to Azoxymethane. J. Natl. Cancer Inst. 51: 1029-1039, 1973.

Case III - 6824 - Tissue from a white rat dying 7 days after subcutaneous inoculation with an infectious agent. Similar lesions were observed in the liver, spleen, kidneys, pancreas, abdominal lymph nodes and adrenal glands. Contributor's diagnosis: Pneumonia, embolic, pyogranulomatous, etiology Yersinia enterocolitica.

Contributor: Walter Reed Army Institute of Research.

Reference: 1. Mollaret, H. H.: A New Pathological Domain: Infections with Yersinia enterocolitica. (Fr.). Ann. Biol. Clin. 30: 1-6, 1972.

### RESULTS 24 APR 74

- Guttman, M. H., et al.: An Interfamilial Outbreak of Yersinia enterocolitica enteritis. N. Eng. J. Med. 288: 1372-1377, 1973.
- Delorme, J., et al.: Yersiniosis in Children. Can. Med. J. 110: 281-284, 1974.

Case IV - MS 72-2 - Tissue from a male mouse 6 or 7 months old.

Contributor's diagnosis: Acute necrotizing myocarditis with rupture resulting in hemotherax.

Comments: In the contributor's experience this disease occurs in male mice of a variety of strains, primarily those maintained behind the barrier. The prothrombin time is prolonged in these mice. The cause has not been elucidated.

Contributor: National Institutes of Health, Comparative Pathology.

References: Angevine, D. M., and Farth, J.: A Fatal Disease of Middle-aged

Mice Characterized by Myocarditis Associated with Hemorrhage
in the Pleural Cavity. Amer. J. Path. 19: 187-195, 1942.

Meir, H., Hoag, W. G., and Allen, R. C.: Spontaneous Hemorrhagic Diathesis in Inbred Mice Due to "Prothrombincomplex" Deficiencies. Fed. Proc. 20: 54, 1961.

Case V - 69/1092 - Spontaneous lesion from a 2-year-old male Charles River CD rat.

Contributor's diagnosis: Hepatocellular carcinoma with acinar formation and venous invasion.

Comments: This noeplasm occurred in a rat in the control group of an experiment testing an hepatic carcinogen. It was indistinguishable from the induced neoplasms. The following reference was cited by the contributor because of its pictures illustrative of similar lesions.

Reference: Reuber, M.: Development of Neoplastic and Preneoplastic Lesions of the Liver in Male Rats Given 0.025% N-2-Fluorenil.

J. Natl. Cancer Inst. 34: 697-724, 1965.

MICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division HINDE HIL

## AFIP Wednesday Slide Conference 1 May 1974

Case 1 - A73-299-17 - Cat.

Case II - 13477 - 2-month-old broiler-fryer.

Case III - 13546 - A calcified subcutaneous lesion from 13-month-old heifer.

Case IV - S-3628 - A 3-year-old DSH male cat had swe ing of carpus of 10 days duration.

MICHAEL A. S. JOHAM

LTC, VC, USA

Veterinary Par' ogy Division

#### AFIP We hand a find Conference

Case Y - 4-73-299-17 - Cal.

. . . .

Gentributaria diagnosis: Feline prole di conta

Comments. The home with hypoples in a gow went a rib from a domentic short bair queen showing andresis " weren, and fever for several days prior to commission and house the was found dood the need misself, Typical intestinal real for found.

Contellutor: Bracks Air Force

Case II - 13477 - 2-month-old see ger.

Contributor's diagnosis: Osteope'rea '.

Contributor: USDA, APMS, Par to delignille.

Case 7tt - 13546 - A calcifict and the lactor from 13-rate theold befor.

Contributor's diagnosis: Hypodesias bela.

Comments: The slides of some of the allerding participants contained non-hort material which was judged to be remainter of the parasite.

Contributor: USDA, APHIS, Path, Com, Celesville.

Case IV - S-3628 - A 3-year-old List on the cartaid walking of cargon of

10 days develop.

Contributor's diagnosis: Fibrous of the

Comments: Radiography demonstrate marked homogeneous radiodensity of the right distal uma.

Connects (meamplimentary) were purious to the accuracy of the durations of the levien. We assume that this for equilien was farmiched by the owner. and in subjective in nourse.

This entity is summer with the contract the theory and in the reference and he

Contributor: Astront Medica Care . re . York .

Reference: Spjut, H. J., chal.: Turners of Bone and Cartilage. Atlas of Tuners Patients y and Sarles, Sens. 5, APIP.

270 250, 1971

1 - - - - - -MUCHALL A. STEDHAM

12 / 12

1 TC. VC USA

HASEALL

#### Historica AFIP Wednesday Slide Conference 9 May 1974

Case I - K73 - 1103 - A chub (Semotilus atzomaculatus caught by local fisherman (Ontario).

22x25=== 00 = le

city Case H - 46211 - A smelt netted during the spring run had lumps in the

Case III - 71-447 - Tissues from a hatchery reared "spl ke" (brock trout x lake trout) in a toxicity experiment. Similar lesions were observed in control and exposed fish. Clinical evidence of disease were not apparent.

Case IV - 73-364 - Turdus merula (European blackbird).

MICHAEL A. 8 IDHAM

LTC, VC, USA

Veterinary Pall agy Division

## Results AFIP Wednesday Slide Conference 8 May 1974

Case I - K73-1103 - A chub (Semotilus atromaculatus) canght by local fisherman (Ontario).

Contributor's diagnosis: Two types of fluke metacercaria and intestinal parasites.

Comments: At the conference we allowed that our level of expertise on the subject did not permit us to differentiate two different metacercariae from different planes of section on one kind of metacercaria. In addition to the ingested bugs seen in all of our sections, some sections contained an intestinal nematode.

Contributor: Ontario Ministry of Agriculture.

References: van Dwyn, C.: Diseases of Fishes. Hiffe Eooks, Ltd., London, 1967.

. Conroy, D. A., and Herman, R. L.: E. Amlacher Textbook of Fish Diseases. T.F.H. Publishers, New York, 1970.

Case II - 46211 - A smelt netted during the spring run had lumps in the body. One other smelt (of 150 caught) was similarly affected.

Contributor's diagnosis: Neurofibroma.

Contributor: New York State Veterinary College, Cornell. University.

Reference: Diseases of Fishes. Ed. L. Mawdesley-Thomas. Symp. Zool.

Soc., London, 30: 191-283 and 285-303, 1972.

Case III - 71-447 - Tissues from a hatchery reared "splate" (brook trout x lake trout) in a toxicity experiment. Similar lesions were observed in control and exposed fish. Clinical evidence of of disease was not apparent.

Contributor diagnosis: Visceral granuloma.

#### KESULTS & MAT 74

#### Case III (cont'd)

Comments: This disease is thought to be related to cottonseed meal in the diet and is primarily seen in brook trout.

Several of our attending participants and a consultant believed that the slide was not sufficiently diagnostic and to appease that feeling we will distribute an additional slide from a case with more definite lesions.

Contributor: Pfizer.

References:

Herman, R. L.: Visceral Granuloma and Nephrocalcinosis. Bureau of Sport Fisheries and Wildlife, Fish Disease Leaflet, 32: 1-2, 1971.

Wood, E. M., Yasutake, W. T., and Lehman, W. L.: A Mycosis-like Granuloma of Fish. J. Inf. Dis. 97: 262-267, 1955.

Case IV - 73-364 - Turdus merula (European blackbird).

Contributor's diagnosis: Arteritis and dissecting aneurysm of the aorta.

Comments: Sarcosporidiosis was incidentally seen.

Contributor: National Zoological Park.

MICHAEL A. STEDHAM

LTC, VC, USA

Veterinary Pathology Division

and a Stelliam

#### KESULIS 15 MAY 74

Case III - 73P308 - A 16-year-old male Palemino horse was presented with a 4-5 day old wire laceration in the right axilla. It was treated with antibiotics and tetanus toxoid. Over the next few days petechiae of membranes, limb edema, and marked abdominal pain developed. The WBC was 12,100 with 89 segmenters, 3 bands, 5 lymphs and 3 monocyter. Platelets were ok. PCV was 35. The horse was killed and necropsy revealed hemorrhages in subcutis, muscle, kidney, lungs and heart. The section is synovial tissue from a stifle joint containing bloody fluid.

Contributor's diagnosis: Hemorrhapic synovitis with necrotizing vasculitis.

Comments: An alpha Streptococcun was cultured from muscle, kidney and urine and a diagnosis of symptomatic purpura hemorrhapica was given to the clinician.

Contributor: Colorado State University.

Case IV - 73-598-12 - One of a group of feeder pigs purchased through a local sale barn.

Contributor's diagnosis: Fibrino-necrotic colitis compatible with swine dysentery.

Comments: Spirochete-like organisms were demonstrated with the Warthin-Starry stain.

Contributor: Kansas State University.

MICHAEL A. STEDHAM

LTC, VC, USA

Veterinary Pathology Division

Note: Owing to a conflict in scheduling (the Comparative Pathology Course at the AFIP was held from May 13-15) the May 15 Wednesday Slide Conference was cancelled. The contributor's diagnoses and comments are included, however.

HARRIO

## AFIP Wednesday Slide Conference 15 May 1974

Case I - 73N559 - A 3-month-old female Arabian colt with respiratory disease of one month duration.

Case II - 73-1022-35 - A 2-month-old male Arabian colt had persistent progmonia.

Case III - 73P308 - A 16-year-old male Palomino horse was presented with a 4-5 day old wire laceration in the right axilla. It was treated with antibiotics and tetanus toxoid. Over the next few days patechiae of membranes, limb edama, and marked abdominal pain developed. The WBC was 12,100 with 89 segmenters, 3 bands, 5 lymphs and 3 monocytes. Platelets were ok. PCV was 35. The horse was killed and necropsy revealed hemorrhages in subcutis, muscle, kidney, lungs and heart. The section is synovial tissue from a stifle joint containing bloody fluid.

Case IV - 73-598-12 - One of a group of faeder pigs purchased through a local sale barn.

MCHAEL A. STEDRAS

LTG, VC, USA

#### Histories. AFIP Wednesday Slide Conference 22 May 1974

HAUZAll

Case I -	P72-683 -	An	incidental	finding	in	a	Rhesus	monke	y that	die:
THE RESERVE TO SHARE THE PERSON NAMED IN	ACTION OF STREET									
cf	2000									

Case II - S-2650 - A mature male monkey (Macaca mulatta) arrived at the research facility on 11 September 1968 and was killed on 21 May 1969.

Case III - A17482 - A Rhesus monkey was on a short term toxicology study. Grossly the kidneys were pale, appeared slightly swollen and had white streaks radiating into the cortex from the medulla.

Volar Was done the following afternoon.

mulasta Station MICHAEL A. STEDHAM

LTC, VC, USA

## Results AFIP Wednesday Slide Conference 22 May 1974

Case I - P72-683 - Ar	incidental finding in a Rhesus monkey that died
of	
Contributor's diagnosi	s: Anatrichosoma cutaneum, simiam hemorrhagic
fever.	41.1
Comments: Transver	se sections of the nematode were seen in thin-walled
vessels of the lamina	propria. These parasites are presumed to be males

vessels of the lamina propria. These parasites are presumed to be males or immature forms of either sex. The more frequently seen location is the epithelium.

Fibrin thrombi in many of the small vessels were the main clues in the section leading to the diagnosis of simian hemorrhagic fever.

Contributor: NIH, Comparative Pathology.

Reference: 1. Allen, A. M.: Occurrence of the Nematode, Anatrichosoma cutaneum, in the Nasal Mucosal of Macaca mulatta Monkeys.

Am. J. Vet. Res. 21: 389-382, 1960.

Orihel, T. C.: Anatrichosomiasis in African Monkeys.
 J. Parasitol. 56: 982-985, 1970.

Case II - S-2650 - A mature male monkey (Macaca mulatia) arrived at the research facility on 11 September 1968 and was killed on 21 May 1969.

Contributor's diagnosis: Kaolin granulomas.

Contributor: Charles Louis Davis, D. V. M. Foundation.

Case III - A17482 - A Rhesus monkey was on a short term toxicology study.

Grossly the kidneys were pale, appeared slightly swollen and had white streaks radiating into the cortex from the medulla.

Contributor's diagnosis: Acute tubular necrosis.

Contributor: Pfizer, Inc.

### REJULTS 22 MAY 74

Case IV - 46126 - A thin adult male raccoon was found c'ad. Necropsy was done the following afternoon.

Contributor's diagnosis: Hepatic necrosis presumably do to Herpesvirus infection.

Comments: Electron micrographs demonstrated viral passicles with the morphologic features of a Herpesvirus.

Two of the attending participants noted cytoplasmic inclusion bodies in bile duct epithelium and suggested a concommitant infection of canine distemper.

Contributor: Cornell University.

MICHAEL A. STEDHAM

LTC, VC, USA

Veterinary Path logy Division

\*\*\*Included in this mailing are the following materials:

- 1. Microslide of visceral granuloma to supplement Case II, 8 May.
- 2. Two transparencies for Case II, 8 May, Contributor's No. 46211.
- Two transparencies for Case IV., 22 May, Contributor's No. 46216.
   The magnification of the electron micrographs is 20,000 (46,000 for the inset). The larger area is from paraffin embedded material; the smaller area and inset are from formalin fixed material.

HAD2 11.

## Histories AFFF Wednesday State Conference 29 May 1976

Case I - 23828 - 1 & 2 B (2 slides) - A 9-year-old female German shepherd - Labrador cross had a left for alimb lamaness. Radiography see alcd a suntains pattern by olving the head of the homeway.

Case II - 518-73 . Popliteal lymph node from a dog with generalized lymphadenopathy.

Gare III - 72-227 - An S-year-old inject male dachthund was begging for food when it collapsed, had a "scizure", and died a short time later. Other history included a perional gland tumor which was excised, recurred, but responded to irradiation therapy. Also the dog had neurogenic polyuris and incontinence noted only during the heat periods of a Great Dane bitch-maintained in the same household.

Case IV - 73064 - A small mass (1 cm. diameter) was essisted from the bulbar surface of the 3rd cyclid of a 10-year-old made heagle.

MICHAGLA, STEDHAM

LTC, VC, USA

Sull

## Results AFIP Wednesday Slide Conference 29 May 1974

Case I - 23828 - 1 & 2 B (2 slides) - A 9-year-old female German shepherd-Labrador cross had a left forelimb lameness. Radiography revealed a sunburst pattern involving the head of the humerus.

Contributor's Diagnosis: Adenocarcinoma, metastatic to bone marrow of humerus.

Comments: The contributor considered the neoplasm most likely to be of bile duct origin.

Contributor: USA Med. Res. and Nutrition Lab., Fitzsimons Hospital

Case II - 518-73 - Popliteal lymph node from a dog with generalized lymphadenopathy.

Contributor's Diagnosis: Reticulum cell sarcoma

Comments: Some of the discussants suggested special staining techniques to rule out the possibility of histoplasmosis or other infectious agents.

Contributor: Med. Res. Lab., Edgewood Arsenal

Case III - 72-287 - An 8-year-old intact male dachshund was begging for food when it collapsed, had a "seizure," and died a short time later. Other history included a perianal gland tumor which was excised, recurred, but responded to irradiation therapy. Also, the dog had neurogenic polyuria and incontinence noted only during the heat periods of a Great Dane bitch maintained in the same household.

Contributor's Diagnosis: Hemangiosarcoma, right coronary groove, heart, with cardiac tamponade secondary to hemorrhage from the neoplasm.

Contributor: Letterman Army Institute of Research

Case IV - 73064 - A small mass (1 cm. diameter) was excised from the bulbar surface of the 3rd eyelid of a 10-year-old male beagle.

Contributor's Diagnosis: Adenocarcinoma, gland of the 3rd eyelid.

Contributor: Food and Drug Administration

NICHAEL A. STEDHAM LTC, VC, USA Veterinary Pathology Division

## AFTE Wedge due FTO Con Linea 5 January -FAJC A

Case 1 - 72-333 - A surgical specimen taken from the J quinal area of a 6-month-old female domestic cat. The specimen was fire, gray, glistening on cut surface and about 4 mm. in diameter.

Case H = V=21451 - This leafon in the peritoncal cavity of lammater was induced by

Care 3D - 22172 - 85 head of 500 lb. cattle on winter ; tere offered a concentrated ration. Each ate as average of 24 lbs. of to 4 in a 2-day period.

Case IV - 73D168 - A 6-week-old calf was found in term all shock.

Necropsy revealed "inflammation in large intesting only. Dishtheritic membrane in rectum .....".

Case V = 73-393 - Tissau from an old dog with bad bres .

MICHARIA LISTAN

LTC, YC. UL

Veterinary P. Objey Division

## Results AFIP Wednesday Slide Conference 5 June 1974

Case I - 73-333 - A surgical specimen taken from the inguinal area of a 6-month-old female domestic cat. The specimen was firm, gray, glistening on cut surface and about 4 cm. in diameter.

Contributor's diagnosis: Duct and stromal hyperplasia or dysplasia.

Comments: A similar lesion was seen in the 27 Feb. conference.

Contributor: University of Arizona.

Case II - V-21461 - This lesion in the peritoneal cavity of hamster was induced by intraperitoneal injection of 10-day-old fetal hamster cells.

Contributor's diagnosis: Teratoma.

Contributor: Merck Sharp & Dohme.

Case III - 22192 - Eighty five head of 500 lb. cattle on winter pasture offered a concentrated ration. Each ate an average of 24 lbs. of feed in a 2-day period. Contributor's diagnosis: Rumenitis.

Contributor: Oklahoma State University.

Reference: Ahrens, F. A.: Histamine, Lactic Acid, and Hypertonicity as Factors in the Development of Rumenitis in Cattle.

Am. J. Vet. Res. 28: 1335-1342, 1967.

Case IV - 73D108 - A 6-week-old calf was found in terminal shock. Necropsy revealed "inflammation in large intestine only. Diphtheritic membrane in rectum .....".

Contributor's diagnosis: Coccidiosis.
Contributor: Colorado State University.

Case V - 73-394 - Tissue from an old dog with bad breath.

Contributor's diagnosis: Chronic glomerulonephritis, interstitial nephritis, cholesterol clefts of unknown cause.

Comments: Our attending renal experts consider this to be a chronic nephritis, but at this stage it is impossible to determine the pathogenesis with certainty.

MICHAEL A. STEDHAM

LTC, VC, USA