

TABLE 1.1(a): LYMPH NODE CHANGES – summary of various changes as a percentage of total number of cases evaluated.

CORTEX	CORTEX	P/C	P/C	M/P	S/H	PMNLs			EPS	PIGM/CRYS			CYSTS/DS	PARASITES	MNGCs	GRANULOMATOUS
F/H	ATROPHY	HYPERPL	ATROPHY			E	N	N/E		H	C	?L				INFLAMMATION
16%	38%	3%	34%	31%	45%	47%	16%	9%	19%	15%	17%	1%	66%	14%	15%	22%

F/H	Follicular hyperplasia	E	Eosinophils
P/C	Paracortical	N	Neutrophils
Hyperpl.	Hyperplasia	H	Haemosiderin
S/H	Sinus histiocytosis	C	Crystalline material
PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
EPS	Erythrophagocytosis		
PIGM/CRYS	Pigment or crystalline material		
DS	Dilated sinuses		
MNGCs	Multinucleate giant cells		

TABLE 1.1(b): LYMPH NODE CHANGES – general atrophy or hyperplasia

ANIMAL NUMBER	PRESCAPULAR LNN.	MANDIBULAR LNN.	AXILLAR LNN.	INGUINAL LNN.	POPLITEAL LNN.	BRONCHIAL LNN.	MESENTERIC LNN.
1	A++	H+++	H+++	H+++	H+++	NTA	A+
2	H+	H+++	A+	NTA	H++	H+	A+
3	H++	NTA	A+	A+	A++	H+++	A+
4	H++	H++	H++	NTA	H+	H+	A+
5	A++	A++	A++	NTA	A++	A++	A++
6	H+	H++	H+	H+++	H++	H++	A+
7	H++	H+	H+	H++	H+	H+	A+
8	H+	H+	H+	H+	A+	H+	NTA
9	A++	A++	A++	A+	A+	A+	H+
10	H+	H+	H+	A++	A++	NTA	NTA
11	A++	A++	A++	A++	A+	NTA	NTA
12	A++	A++	A++	A++	A++	NTA	NTA
13	A++	NTA	NTA	NTA	NTA	NTA	NTA
14	A++	H+	A++	NTA	NTA	NTA	NTA
15	A++	A++	A+	NTA	NTA	NTA	NTA
16	A++	A++	NTA	NTA	NTA	NTA	NTA
17	A+++	A+++	NTA	NTA	A+++	A+++	NTA
18	A++	A+	H+	NTA	A++	NTA	A+
19	A+	H+	A+	A++	A++	A++	NTA
20	A+++	A+	A+++	A++	A++	A++	A+++
21	A++	NTA	A+	A+	A++	H++	A+
22	A+++	A++	H+	A+	A+	A+	A++
23	H++	H++	H+	NTA	H+	-	H++

Lnn. Lymph nodes
A Atrophy
H Hyperplasia
NTA No tissue available for histopathology
+ Mild
++ Moderate
+++ Severe

TABLE 1.2: LYMPH NODE CHANGES – Superficial cervical (prescapular)

ANIMAL NUMBER	CORTEX F/H	CORTEX ATROPHY	P/C HYPERPL.	P/C ATROPHY	M/P	S/H	PMNLs	ERYTHRO= PHAGOCYTOSIS	PIGMENT/ CRYSTALS	CYSTS/ DILATED SINUSES	PARASITES	MNGCs	GRANULOMATOUS INFLAMMATION
1	-	++	-	++	+++	+	E++/N+	+	H+	-	-	-	-
2	+	-	-	+	-	+	E++	-	-	+	-	-	-
3	++	-	-	-	-	++	E++	-	-	+	-	-	-
4	++	-	-	++	++	+++	E+++	++	-	+	M++	+	+
5	-	++	-	++	++	++	E+	-	H+	+	-	-	-
6	+	-	-	+	-	+	E+	-	-	+	-	-	-
7	++	-	-	+	+	++	E++/N+	+	-	++	-	-	-
8	+	-	-	+	+	+	E+	+	H+	+	-	-	-
9	-	++	-	++	+	++	N+	-	-	++	-	+	+
10	+	-	-	+	+	++	E+	-	-	+	-	-	-
11	-	++	-	++	-	+	-	-	?L+	+	-	-	-
12	-	++	-	++	+	+	E+/N+	+	-	+	-	-	-
13	-	++	-	+	-	++	E++	-	-	-	-	-	-
14	-	++	-	++	+	+	N+	+	H+	++	M+	-	-
15	-	++	-	++	+	+	-	-	C+	+	-	-	-
16	-	++	-	++	+	+	-	-	C+	-	-	+	-
17	-	+++	-	+++	++	+	-	-	H+	+	-	-	-
18	-	++	-	++	+	+	E+	+	H+/C+	+++	-	-	-
19	-	+	-	+	+	++	N+	-	-	++	-	-	++
20	-	+++	-	+++	+	+	-	-	-	-	-	-	-
21	-	++	-	++	++	++	E+	-	-	-	-	-	-
22	-	+++	-	++	++	-	N+	-	-	-	-	-	-
23	++	-	-	-	+	+	N+	-	H+	++	-	-	-

+	Mild	F/H	Follicular hyperplasia	E	Eosinophils
++	Moderate	P/C	Paracortical	N	Neutrophils
+++	Severe	Hyperpl.	Hyperplasia	H	Haemosiderin
		M/P	Medullary plasmacytosis	M	Microfilaria
		S/H	Sinus histiocytosis	C	Crystalline material
		PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
		MNGs	Multinucleate giant cells		

TABLE 1.3: LYMPH NODE CHANGES - Mandibular

ANIMAL NUMBER	CORTEX F/H	CORTEX ATROPHY	P/C HYPERPL.	P/C ATROPHY	M/P	S/H	PMNLs	ERYTHRO= PHAGOCYTOSIS	PIGMENT/ CRYSTALS	CYSTS/ DILATED SINUSES	PARASITES	MNGCs	GRANULOMATOUS INFLAMMATION
1	+++	-	++	-	-	++	E++	+	-	-	-	-	-
2	+++	-	++	-	-	-	E++	-	-	+	-	-	-
3	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
4	++	-	+	-	-	++	E+++	+	H+	++	-	-	-
5	-	++	-	++	++	++	E+/N+	-	-	-	-	-	-
6	++	-	-	-	+	++	E+	-	-	+	-	-	-
7	+	-	-	+	-	+	E++	-	-	+	-	-	-
8	+	-	-	+	+++	+++	E+	-	H+	+	-	-	-
9	-	++	-	++	++	+++	N+	-	-	+	-	+	++
10	+	-	-	+	-	++	E+	-	-	+	-	-	-
11	-	++	-	++	-	-	-	-	C++	+	-	-	-
12	-	++	-	++	-	-	E+	-	-	+	-	-	-
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	+	-	-	-	++	+	E+	-	-	++	M+	-	+
15	-	++	-	+	-	-	E++	-	-	+	-	-	-
16	-	++	-	+++	-	+	-	-	-	+	-	-	-
17	-	+++	-	+++	+	-	-	-	H+	-	-	-	-
18	-	+	-	+	++	++	E++	++	H+	+++	-	-	-
19	+	-	-	+	+	++	-	+	-	+	-	-	+
20	-	+	-	+	++	++	N+	+	H+	+	-	-	-
21	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
22	-	++	-	++	+	+	N+	-	-	-	-	-	-
23	++	-	-	-	-	+	-	-	-	+	-	-	-

+	Mild	F/H	Follicular hyperplasia	E	Eosinophils
++	Moderate	P/C	Paracortical	N	Neutrophils
+++	Severe	Hyperpl.	Hyperplasia	H	Haemosiderin
NTA	No tissue available for histopathology	M/P	Medullary plasmacytosis	M	Microfilaria
		S/H	Sinus histiocytosis	C	Crystalline material
		PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
		MNGs	Multinucleate giant cells		

TABLE 1.4: LYMPH NODE CHANGES - Axillar

ANIMAL NUMBER	CORTEX F/H	CORTEX ATROPHY	P/C HYPERPL.	P/C ATROPHY	M/P	S/H	PMNLs	ERYTHRO= PHAGOCYTOSIS	PIGMENT/ CRYSTALS	CYSTS/ DILATED SINUSES	PARASITES	MNGCs	GRANULOMATOUS INFLAMMATION
1	+++	-	++	-	-	+++	E++/N+	+++	-	+	M+	-	-
2	+	+	-	+	++	++	E++	+	-	-	-	-	-
3	-	+	-	-	+	-	E+	+	-	+	-	-	-
4	++	-	+	-	-	++	E+++	+	-	++	M+	+	+
5	-	++	-	+++	+++	++	E+	-	-	-	-	-	-
6	+	-	-	+	+	++	E+	-	-	+	-	-	-
7	+	-	-	+	-	+	E++	-	-	+	-	-	-
8	+	-	-	+	-	-	E+	-	-	+	-	-	-
9	-	++	-	++	+++	+++	N++	-	-	-	-	-	++
10	+	-	-	+	-	-	-	-	-	+	-	-	-
11	-	++	-	++	-	+	-	-	?L+	+	-	-	-
12	-	++	-	+	+	++	-	-	C+	+	-	-	-
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	-	++	-	++	-	+	-	-	C+	++	-	-	-
15	-	+	-	+	-	-	-	-	C++	+	-	+	-
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
18	+	-	-	+	++	+	N+	-	C++	-	-	-	+
19	-	+	-	++	++	+	-	+	-	-	-	-	+++
20	-	+++	-	++	+	-	-	-	C++	-	-	+	-
21	-	+	-	++	+	+	E++	+	C++	+	-	-	-
22	+	-	-	+	-	-	-	-	-	++	-	-	-
23	+	-	-	+	+	+	-	-	-	+	-	-	-

+	Mild	F/H	Follicular hyperplasia	E	Eosinophils
++	Moderate	P/C	Paracortical	N	Neutrophils
+++	Severe	Hyperpl.	Hyperplasia	H	Haemosiderin
NTA	No tissue available for histopathology	M/P	Medullary plasmacytosis	M	Microfilaria
		S/H	Sinus histiocytosis	C	Crystalline material
		PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
		MNGCs	Multinucleate giant cells		

TABLE 1.5: LYMPH NODE CHANGES - Inguinal

ANIMAL NUMBER	CORTEX F/H	CORTEX ATROPHY	P/C HYPERPL.	P/C ATROPHY	M/P	S/H	PMNLs	ERYTHRO= PHAGOCYTOSIS	PIGMENT/ CRYSTALS	CYSTS/ DILATED SINUSES	PARASITES	MNGCs	GRANULOMATOUS INFLAMMATION
1	+++	-	-	-	-	+++	E+++	++	-	++	M+	+	+
2	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
3	-	+	-	+	+	+++	E++	-	-	++	M++	++	+
4	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
5	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
6	+	-	-	+	-	-	E+	-	-	+	M+	+	+
7	++	-	-	+	+	+	E++	+	H+	++	-	-	-
8	+	-	-	+	-	-	E+	-	-	+	-	-	-
9	-	+	-	+	+	+	N+	-	-	++	-	-	-
10	-	++	-	++	+++	++	E++	-	H+	+	M+	-	+
11	-	++	-	++	-	+	E+/N+	-	-	-	-	-	-
12	-	++	-	++	++	+	-	-	C+	-	-	+	+
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
15	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
18	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
19	-	++	-	+	++	++	-	-	H+/C+	++	M+	-	++
20	-	++	-	++	++	+	N++	-	H+	+++	-	-	-
21	+	-	-	++	++	++	N+	+	H+/C+	++	-	-	-
22	+	-	-	++	+	-	N+	-	-	+	-	-	-
23	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA

+	Mild	F/H	Follicular hyperplasia	E	Eosinophils
++	Moderate	P/C	Paracortical	N	Neutrophils
+++	Severe	Hyperpl.	Hyperplasia	H	Haemosiderin
NTA	No tissue available for histopathology	M/P	Medullary plasmacytosis	M	Microfilaria
		S/H	Sinus histiocytosis	C	Crystalline material
		PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
		MNGs	Multinucleate giant cells		

TABLE 1.6: LYMPH NODE CHANGES - Popliteal

ANIMAL NUMBER	CORTEX F/H	CORTEX ATROPHY	P/C HYPERPL.	P/C ATROPHY	M/P	S/H	PMNLs	ERYTHRO= PHAGOCYTOSIS	PIGMENT/ CRYSTALS	CYSTS/ DILATED SINUSES	PARASITES	MNGCs	GRANULOMATOUS INFLAMMATION
1	+++	-	-	+	-	+++	E+/N+	-	C+	-	M+	+	+
2	++	-	-	+	+	++	E+	-	-	-	-	-	-
3	-	++	-	++	-	++	E+	-	-	+	M+	+	-
4	+	-	-	-	-	++	E++	-	-	-	-	-	-
5	-	++	-	++	++	++	N+	-	-	-	-	-	-
6	++	-	-	+	+++	++	E+	-	-	+	-	-	-
7	+	-	-	+	+	++	E++	+	-	+	-	-	-
8	-	+	-	+	+++	++	E+	-	-	++	-	-	-
9	-	+	-	+	++	++	N+	-	-	+	-	-	-
10	-	++	-	-	-	++	E+	-	-	+	-	-	-
11	-	+	-	-	+	++	E++/N+	-	-	+	-	-	-
12	-	++	-	++	++	+	-	-	C+	-	-	+	+
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
15	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	-	+++	-	+++	++	-	-	-	C+	-	-	-	+
18	-	++	-	+	++	++	-	-	C+	+	-	+	+
19	-	++	-	+	++	++	-	+	H+	+	M+	+	++
20	-	++	-	++	+	+	-	-	C+	-	-	+	++
21	-	++	-	+	++	-	-	-	C+	-	-	-	-
22	-	+	-	+	++	-	-	-	-	-	-	-	-
23	+	-	-	-	-	++	-	-	-	+	-	-	-

+	Mild	F/H	Follicular hyperplasia	E	Eosinophils
++	Moderate	P/C	Paracortical	N	Neutrophils
+++	Severe	Hyperpl.	Hyperplasia	H	Haemosiderin
NTA	No tissue available for histopathology	M/P	Medullary plasmacytosis	M	Microfilaria
		S/H	Sinus histiocytosis	C	Crystalline material
		PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
		MNGs	Multinucleate giant cells		

TABLE 1.7: LYMPH NODE CHANGES - Bronchial

ANIMAL NUMBER	CORTEX F/H	CORTEX ATROPHY	P/C HYPERPL.	P/C ATROPHY	M/P	S/H	PMNLs	ERYTHRO= PHAGOCYTOSIS	PIGMENT/ CRYSTALS	CYSTS/ DILATED SINUSES	PARASITES	MNGCs	GRANULOMATOUS INFLAMMATION
1	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
2	-	-	+	-	-	-	-	-	-	-	-	-	-
3	+++	-	+++	-	-	-	E+	-	-	+	-	-	-
4	+	-	-	-	-	++	E++	-	-	+	-	-	-
5	-	++	-	-	-	+	E+/N+	-	-	-	-	-	-
6	++	-	-	-	-	+	E++/N+	-	-	-	M+	-	-
7	+	-	-	-	-	++	E+	+	-	-	-	-	-
8	+	-	-	+	-	-	E+	-	-	+	-	-	-
9	-	-	-	+	++	++	N+	+	-	++	-	-	+
10	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
11	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
12	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
15	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	-	+++	-	+++	++	-	-	-	C+	-	-	-	-
18	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
19	-	++	-	+	++	++	-	-	H+	-	-	-	++
20	-	++	-	+	+	+	N+	-	C+	-	-	-	-
21	++	-	-	+	+	+	E+++	-	-	+	M+	+	++
22	-	+	-	+	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	+	-	-	-	-	-	-	-

+	Mild	F/H	Follicular hyperplasia	E	Eosinophils
++	Moderate	P/C	Paracortical	N	Neutrophils
+++	Severe	Hyperpl.	Hyperplasia	H	Haemosiderin
NTA	No tissue available for histopathology	M/P	Medullary plasmacytosis	M	Microfilaria
		S/H	Sinus histiocytosis	C	Crystalline material
		PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
		MNGs	Multinucleate giant cells		

TABLE 1.8: LYMPH NODE CHANGES – Mesenteric

ANIMAL NUMBER	CORTEX F/H	CORTEX ATROPHY	P/C HYPERPL.	P/C ATROPHY	M/P	S/H	PMNLs	ERYTHRO= PHAGOCYTOSIS	PIGMENT/ CRYSTALS	CYSTS/ DILATED SINUSES	PARASITES	MNGCs	GRANULOMATOUS INFLAMMATION
1	-	+	-	++	-	++	E+	-	-	-	-	-	-
2	-	+	-	++	++	-	E+	-	-	-	-	-	-
3	-	+	-	-	-	++	E+	-	-	+	-	-	-
4	-	+	-	+	-	++	E+	-	-	+	-	-	-
5	-	++	-	+	-	+	E+	-	-	+	-	-	-
6	-	+	-	+	-	+++	E++	-	-	-	-	-	-
7	-	+	-	++	++	++	E+	-	-	+	-	-	-
8	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
9	+	-	-	+	+	+	N+	-	-	+	-	-	+
10	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
11	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
12	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
15	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
18	-	+	-	+	+	++	E++/N+	-	-	++	-	-	-
19	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
20	-	+++	-	++	-	-	-	-	-	+	-	-	-
21	-	+	-	+	+	+	E+	-	-	++	M+	-	-
22	-	++	-	+	+++	++	E+	-	-	-	-	-	-
23	++	-	-	-	-	+	-	-	-	-	-	-	-

+	Mild	F/H	Follicular hyperplasia	E	Eosinophils
++	Moderate	P/C	Paracortical	N	Neutrophils
+++	Severe	Hyperpl.	Hyperplasia	H	Haemosiderin
NTA	No tissue available for histopathology	M/P	Medullary plasmacytosis	M	Microfilaria
		S/H	Sinus histiocytosis	C	Crystalline material
		PMNLs	Polymorphonuclear leukocytes	?L	Possibly lipofuscin
		MNGs	Multinucleate giant cells		

TABLE 2: PULMONARY CHANGES

ANIMAL NUMBER	INTERSTITIAL PNEUMONIA	GRANULOMATOUS PNEUMONIA	BRONCHIECTASIS	PARASITES	ANTHRASILICOSIS	NEOPLASIA	ZN STAIN	MYCOBACTERIAL CULTURE
1	-	+++	-	-	-	-	Negative	Negative
2	+	-	-	H	+	-	-	-
3	+	-	-	H	+	-	Negative	-
4	+	-	-	H	-	-	-	-
5	+	-	-	H	-	-	-	Negative
6	+	-	-	H	-	-	-	Negative
7	+++	+++	+++	-	++	-	-	Negative
8	++	-	-	H	-	-	Negative	Negative
9	+	+++	+++	H	+	-	Negative	Negative
10	++	-	-	-	++	-	-	Negative
11	NTA	NTA	NTA	NTA	NTA	NTA	NTA	Negative
12	+	-	-	H	+	Adenoma	-	-
13	++	-	-	-	+	-	-	-
14	+	-	-	-	++	-	-	-
15	++	++	-	-	+	-	-	-
16	++	-	-	-	++	-	-	-
17	++	+	-	H	+	-	-	-
18	+	-	-	-	+	-	-	-
19	-	+++	+++	H/M	-	-	-	Positive
20	++	-	-	-	+	-	-	Positive
21	+	-	-	-	-	-	-	Negative
22	+	-	-	H	-	-	-	Negative
23	-	-	-	-	-	-	-	Negative

+ Mild
 ++ Moderate
 +++ Severe
 NTA No tissue available for histopathology
 H *Hepatozoon* spp.
 M *Microfilaria*

TABLE 3.1: GASTRIC CHANGES

ANIMAL NUMBER	CHRONIC GASTRITIS	BACTERIA	PROTOZOA	GRANULOMATOUS INFLAMMATION	NEMATODES	HEPATOZOON
1	Yes	-	-	-	-	-
2	Yes	-	-	-	-	-
3	-	-	-	-	-	-
4	Yes	-	-	-	-	-
5	-	-	-	-	-	-
6	Yes	-	-	-	-	-
7	Yes	Yes	-	-	-	-
8	NTA	NTA	NTA	NTA	NTA	NTA
9	-	Yes	Yes	Yes	-	-
10	-	-	-	-	-	-
11	-	-	-	-	Yes	-
12	NTA	NTA	NTA	MTA	NTA	NTA
13	NTA	NTA	NTA	NTA	NTA	NTA
14	-	-	-	-	-	-
15	NTA	NTA	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA	NTA	NTA
17	Autolysed	Autolysed	Autolysed	Autolysed	Autolysed	Autolysed
18	-	-	-	-	-	Yes
19	-	-	-	-	-	-
20	Yes	-	Yes	-	-	-
21	-	-	-	-	-	-
22	Yes	-	-	Yes	-	-
23	Yes	-	-	-	-	-

NTA No tissue available for histology

TABLE 3.2: SMALL INTESTINAL CHANGES

ANIMAL NUMBER	BACTERIA	EOSINOPHILIA	L/PL ENTERITIS	PARASITIC GRANULOMA	FB PENETRATION	CESTODES	TREMATODES	NEMATODES	MICROFILARIA
1	+	+	-	-	-	-	-	-	-
2	+	++	-	-	-	-	-	-	-
3	++	+	-	-	-	+	-	-	-
4	++	++	-	-	-	++	-	-	-
5	-	+	-	-	-	+	-	-	-
6	-	+	-	-	-	++	-	-	-
7	++	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-
9	+	-	+	+	-	-	-	-	-
10	-	-	+	-	-	-	-	+	-
11	-	-	-	-	-	-	+	-	-
12	+	-	-	-	-	-	-	-	-
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	-	+	-	-	+	-	-	+	-
15	-	-	-	-	-	-	-	+	-
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	Autolysed	Autolysed	Autolysed	Autolysed	Autolysed	Autolysed	Autolysed	Autolysed	Autolysed
18	-	-	-	-	-	-	-	-	-
19	-	-	+	-	-	+	-	-	+
20	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-
22	-	+	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-

+ Mild
 ++ Moderate
 +++ Severe
 L/PL Lympho-plasmacytic
 FB Foreign body
 NTA No tissue available for histology

TABLE 3.3: COLONIC CHANGES

ANIMAL NUMBER	MILD COLITIS	FB PENETRATION	GRANULOMATOUS INFLAMMATION	BACTERIA
1	-	-	-	-
2	NTA	NTA	NTA	NTA
3	NTA	NTA	NTA	NTA
4	NTA	NTA	NTA	NTA
5	-	-	-	-
6	+	-	-	-
7	-	+	-	+
8	-	-	-	-
9	+	-	+	-
10	-	-	-	-
11	+	-	-	-
12	NTA	NTA	NTA	NTA
13	NTA	NTA	NTA	NTA
14	-	-	-	-
15	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA
17	Autolysed	Autolysed	Autolysed	Autolysed
18	-	-	-	-
19	-	-	-	-
20	-	-	-	-
21	-	-	-	-
22	+	-	-	+
23	-	-	-	-

+ Mild
 FB Foreign body
 NTA No tissue available for histology

TABLE 4: BONE MARROW CHANGES

ANIMAL NUMBER	CELLS	MEGAKARYOCYTES	M:E	EOSINOPHILS	NEUTROPHILS	PLASMA CELLS	LYMPHOCYTES
1	↑	↑	2:1	+++	N	N	N
2	N	N	1:1	++	N	N	N
3	↑	↑	2:1	+++	N	N	N
4	N	N	1:1	+++	↑(mature)	N	N
5	NTA	NTA	NTA	NTA	NTA	NTA	NTA
6	N	↓	1:1	++	N	N	N
7	NTA	NTA	NTA	NTA	NTA	NTA	NTA
8	↑	N	2:1	++	N	N	N
9	↑	N	3:1(↓ RBC's)	++	N	↑	↑
10	NTA	NTA	NTA	NTA	NTA	NTA	NTA
11	N	N	3:1(↑ myeloid prec)	++	↑(mature)	↑	↑
12	NTA	NTA	NTA	NTA	NTA	NTA	NTA
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	NTA	NTA	NTA	NTA	NTA	NTA	NTA
15	NTA	NTA	NTA	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	NTA	NTA	NTA	NTA	NTA	NTA	NTA
18	NTA	NTA	NTA	NTA	NTA	NTA	NTA
19	↑	↑	3:1	++	N	↑	↑
20	N	N	1:1	+++	↑(mature)	↓	N
21	↑	N	1:5(↓ myeloid prec)	+++	↑(mature)	↑	N
22	N	N	1:4(↓ myeloid prec)	++	↑(mature)	↑	N
23	↑	↑	2:1	+++	N	↑	N

Cells Total number of cells ++ Moderate numbers
M:E Myeloid:erythroid ratio (2:1 = normal) +++ High numbers
↑ Increased
↓ Decreased
N Normal
RBCs Red blood cells
Myeloid prec Myeloid precursors
NTA No tissue available

TABLE 5: RENAL CHANGES

ANIMAL NUMBER	CONGESTION	GLOMERULONEPHRITIS	CIN	INFARCTION	GRANULOMATOUS NEPHRITIS	AMYLOIDOSIS
1	-	-	-	-	-	-
2	-	MGN (GS)	-	-	-	-
3	+	MGN (FS)	-	-	-	-
4	-	-	-	-	-	-
5	+	-	-	-	-	-
6	++	-	-	-	-	-
7	+	-	-	-	-	-
8	+	-	-	-	-	-
9	-	MGN (FS)	++	Chronic	++	-
10	+	-	-	-	-	-
11	+	MGN (FS)	-	-	-	Med. +++
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	Med. ++
15	-	-	-	-	-	-
16	-	-	-	-	-	-
17	-	-	-	-	-	Med. +
18	-	-	-	-	-	Med. +
19	-	MGN (FS)	-	-	++	-
20	-	MGN (FS)	-	-	-	Glom. +
21	-	MGN (FS)	-	-	-	Med. +
22	-	MGN (FS)	-	-	-	-
23	+	-	-	-	-	-

CIN Chronic interstitial nephritis + Mild
MGN Membranous glomerulonephritis ++ Moderate
FS Focal segmental +++ Severe
GS Generalized segmental
Med. Medullary
Glom. Glomerular

TABLE 6: SKELETAL MUSCLE CHANGES

ANIMAL NUMBER	MYOSITIS	DEGENERATION	REGENERATION	ATROPHY	NECROSIS	SARCOCYSTIS	HEPATOZOON	TRICHINELLA
1	-	-	Multifocal	-	-	Yes	-	-
2	Mild	-	-	-	-	Yes	Yes	-
3	Mild	-	-	-	-	Yes	Yes	-
4	Mild	-	-	-	-	Yes	-	-
5	-	-	-	-	-	Yes	Yes	Yes
6	-	-	-	-	-	-	Yes	-
7	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
8	Moderate	-	Multifocal	-	Multifocal	-	-	-
9	-	-	-	-	-	Yes	Yes	Yes
10	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
11	-	-	-	-	-	Yes	Yes	Yes
12	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
13	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
14	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
15	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
16	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
17	NTA	NTA	NTA	NTA	NTA	NTA	NTA	NTA
18	Mild	Mild	-	-	-	-	-	Yes
19	Mild	Mild	-	-	-	-	-	Yes
20	Mild	Mild	-	Mild	-	Yes	Yes	Yes
21	-	-	-	-	-	Yes	-	-
22	-	-	-	Mild	-	Yes	Yes	-
23	Mild	Mild	-	-	-	Yes	Yes	-

NTA No tissue available for histopathology

TABLE 7: MYOCARDIAL CHANGES

ANIMAL NUMBER	MYOCARDITIS	DEGENERATION	FIBROSIS	SARCOCYSTIS	HEPATOZOON
1	Mild	Multifocal	-	-	Yes
2	-	-	-	-	Yes
3	-	-	-	-	Yes
4	Mild	-	-	-	-
5	Mild	Multifocal	-	-	Yes
6	Mild	-	-	-	Yes
7	Mild	-	-	-	Yes
8	-	Multifocal	-	-	Yes
9	Mild	-	-	-	Yes
10	Mild	Multifocal	-	-	Yes
11	-	-	Multifocal	-	-
12	-	-	-	-	Yes
13	Mild	-	-	-	Yes
14	-	-	-	-	Yes
15	Mild	-	-	-	Yes
16	Mild	Multifocal	-	-	Yes
17	-	-	-	Yes	Yes
18	Mild	-	-	-	Yes
19	-	-	-	-	Yes
20	-	-	-	-	Yes
21	Mild	Multifocal	Multifocal	-	Yes
22	Mild	-	-	-	Yes
23	Mild	Multifocal	-	-	Yes

TABLE 8: HEPATIC CHANGES

ANIMAL NUMBER	CONGESTION	REACTIVE HEPATITIS	EMH	GRANULOMATOUS INFLAMMATION	PORTAL INFLAMMATION
1	++	-	+	-	-
2	++	-	-	-	-
3	++	+	+	+	-
4	++	-	-	+	-
5	+	+	-	-	+
6	+	-	-	+	-
7	++	-	-	-	+
8	+	-	-	-	-
9	+	-	-	+	+
10	+	-	+	+	-
11	++	-	-	-	-
12	+	-	-	+	-
13	+	-	-	-	+
14	+	-	-	+	-
15	+	-	-	+	-
16	+	-	-	+	-
17	+	-	-	-	-
18	+	-	-	+	+
19	+	-	-	+	+
20	+	+	-	+	+
21	+	-	-	+	+
22	+	-	-	+	-
23	+	-	-	+	-

EMH Extramedullary haematopoiesis

+ Mild

++ Moderate

TABLE 9: CENTRAL NERVOUS SYSTEM CHANGES

ANIMAL NUMBER	SPINAL CORD	BRAIN		
		CEREBRUM	CEREBELLUM	BRAIN STEM
1	N	N	N	N
2	N	NTA	NTA	NTA
3	Mild perivasc. haemorr. (GM)	N	N	N
4	N	N	N	N
5	M/f mineralization of DM + mild cong.	N	N	M/f mineral. Of bvs in choroid plexus
6	Very mild Wall degen (dors + lat tracts) + mild periv. haemorr. (GM)	N	N	N
7	N	N	Mild haemorr. In pia mater	M/f small haemor. (perivasc)
8	Mild m/f meningitis	Mild cong	Mild cong	Mild cong
9	N	N	N	N
10	N	Mild cong	Mild cong	Mild cong
11	N	N	N	N
12	NTA	NTA	NTA	NTA
13	NTA	NTA	NTA	NTA
14	NTA	NTA	NTA	NTA
15	NTA	NTA	NTA	NTA
16	NTA	N	NTA	NTA
17	N	N	N	N
18	Very mild Wall. degen. (mostly ventral tracts)	M/f malacia	N	N
19	Very mild Wall. degen. (mostly ventral tracts)	N	N	N
20	Moderate Wall. degen. (mostly ventral tracts)	N	N	N
21	N	N	N	N
22	N	N	N	N
23	N	N	N	N

GM	Grey matter	dors	dorsal	perivasc	perivascular
DM	Dura mater	lat	lateral	haemor	haemorrhage
M/f	Multifocal	Wall degen	Wallerian degeneration		
N	Normal	cong	congestion		
NTA	No tissue available for histology	bvs	blood vessels		

TABLE 10.1: IMMUNOPEROXIDASE – Superficial cervical (prescapular) lymph node

ANIMAL NUMBER	PAN-T				CD4				CD8				ANTI-B			
	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3+	2+	2+	2+	3+	1+	2+	1+	2+	1+	0	1+	0	1+	3+	2+
3	3+	2+	2+	2+	3+	1+	1+	1+	3+	1+	0	2+	0	2+	3+	3+
4	3+	2+	2+	2+	2+	0	1+	1+	1+	0	0	2+	0	1+	3+	2+
18	3+	2+	2+	2+	2+	1+	0	1+	2+	1+	1+	2+	0	1+	2+	2+
19	3+	2+	1+	2+	2+	1+	1+	2+	2+	1+	1+	2+	0	1+	3+	2+
20	3+	2+	1+	2+	3+	1+	1+	2+	2+	1+	1+	2+	0	1+	2+	2+

TABLE 10.2: IMMUNOPEROXIDASE – Mandibular lymph node

ANIMAL NUMBER	PAN-T				CD4				CD8				ANTI-B			
	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	3+	1+	1+	2+	3+	1+	1+	1+	2+	1+	0	1+	0	1+	3+	2+
19	3+	2+	1+	2+	2+	1+	1+	2+	2+	1+	1+	2+	1+	1+	2+	2+
20	3+	2+	2+	2+	3+	1+	0	1+	2+	1+	0	2+	0	1+	2+	3+

Pan – T	Anti-felineT lymphocyte marker (572)	PC	Paracortex
CD4	Anti-feline CD4 lymphocyte marker (MAE38)	FM	Follicular mantle
CD8	Anti-feline CD8 lymphocyte marker (117)	FC	Follicular centre
Anti-B	Anti-B lymphocyte marker (B5)	MC	Medullary cords
0	No staining	-	No staining done
1+	Mild staining		
2+	Moderate staining		
3+	Marked staining		

TABLE 10.3: IMMUNOPEROXIDASE – Axillar lymph node

ANIMAL NUMBER	PAN-T				CD4				CD8				ANTI-B			
	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	3+	2+	2+	2+	2+	1+	1+	1+	2+	0	0	1+	0	1+	3+	2+
20	3+	2+	1+	2+	1+	1+	1+	1+	2+	1+	0	1+	0	0	2+	2+

TABLE 10.4: IMMUNOPEROXIDASE – Inguinal lymph node

ANIMAL NUMBER	PAN-T				CD4				CD8				ANTI-B			
	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	2+	2+	1+	2+	2+	1+	0	2+	2+	1+	0	2+	0	1+	2+	3+
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	3+	2+	2+	2+	3+	2+	1+	1+	2+	1+	0	2+	0	1+	3+	3+

Pan – T	Anti-felineT lymphocyte marker (572)	PC	Paracortex
CD4	Anti-feline CD4 lymphocyte marker (MAE38)	FM	Follicular mantle
CD8	Anti-feline CD8 lymphocyte marker (117)	FC	Follicular centre
Anti-B	Anti-B lymphocyte marker (B5)	MC	Medullary cords
1	No staining	-	No staining done
1+	Mild staining		
2+	Moderate staining		
3+	Marked staining		

TABLE 10.5: IMMUNOPEROXIDASE – Popliteal lymph node

ANIMAL NUMBER	PAN-T				CD4				CD8				ANTI-B			
	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC
1	3+	2+	2+	2+	3+	2+	1+	1+	2+	1+	1+	2+	0	1+	3+	2+
2	3+	2+	2+	2+	3+	1+	2+	2+	3+	1+	1+	2+	0	2+	3+	2+
3	3+	1+	1+	2+	3+	1+	1+	1+	3+	1+	0	2+	0	1+	3+	2+
4	3+	2+	1+	2+	3+	1+	2+	2+	3+	1+	0	2+	0	2+	3+	3+
18	3+	1+	1+	2+	3+	1+	1+	2+	2+	0	0	2+	0	1+	3+	3+
19	3+	2+	2+	2+	2+	1+	1+	1+	2+	1+	0	1+	0	1+	3+	2+
20	3+	2+	2+	2+	2+	1+	2+	2+	2+	1+	0	1+	0	1+	3+	3+

TABLE 10.6: IMMUNOPEROXIDASE – Bronchial lymph node

ANIMAL NUMBER	PAN-T				CD4				CD8				ANTI-B			
	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	3+	2+	1+	3+	2+	1+	1+	1+	2+	0	0	2+	0	1+	3+	3+
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	3+	2+	2+	2+	3+	1+	2+	2+	2+	1+	0	2+	0	1+	3+	3+

Pan – T	Anti-felineT lymphocyte marker (572)	PC	Paracortex
CD4	Anti-feline CD4 lymphocyte marker (MAE38)	FM	Follicular mantle
CD8	Anti-feline CD8 lymphocyte marker (117)	FC	Follicular centre
Anti-B	Anti-B lymphocyte marker (B5)	MC	Medullary cords
2	No staining	-	No staining done
1+	Mild staining		
2+	Moderate staining		
3+	Marked staining		

TABLE 10.7: IMMUNOPEROXIDASE – Mesenteric lymph node

ANIMAL NUMBER	PAN-T				CD4				CD8				ANTI-B			
	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC	PC	FM	FC	MC
1	3+	2+	2+	2+	3+	2+	1+	1+	2+	1+	1+	2+	0	1+	3+	3+
2	3+	2+	1+	2+	3+	1+	2+	2+	2+	1+	0	2+	0	1+	3+	2+
3	3+	2+	1+	2+	3+	1+	1+	1+	2+	1+	0	2+	0	1+	3+	3+
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	3+	2+	1+	2+	3+	1+	0	1+	2+	1+	0	2+	0	1+	3+	3+
19	3+	2+	2+	2+	3+	2+	2+	2+	3+	1+	1+	2+	0	1+	3+	2+
20	3+	2+	1+	2+	3+	2+	0	1+	2+	1+	1+	2+	0	1+	3+	3+

Pan – T	Anti-felineT lymphocyte marker (572)	PC	Paracortex
CD4	Anti-feline CD4 lymphocyte marker (MAE38)	FM	Follicular mantle
CD8	Anti-feline CD8 lymphocyte marker (117)	FC	Follicular centre
Anti-B	Anti-B lymphocyte marker (B5)	MC	Medullary cords
3	No staining	-	No staining done
1+	Mild staining		
2+	Moderate staining		
3+	Marked staining		

TABLE 11: FIV SEROLOGY RESULTS

ANIMAL NUMBER	PUMA LENTIVIRUS ELISA	PUMA LENTIVIRUS WESTERN BLOT
1	Positive	Positive
2	Positive	Positive
3	Positive	Positive
4	Positive	Positive
5	Positive	Positive
6	Positive	Positive
7	NSA	NSA
8	NSA	NSA
9	NSA	NSA
10	NSA	NSA
11	NSA	NSA
12	Positive	Positive
13	Negative	Negative
14	Positive	Positive
15	Negative	Inconclusive
16	Negative	Negative
17	NSA	NSA
18	Positive	Positive
19	Positive	Positive
20	Positive	Positive
21	Positive	Negative
22	Negative	Negative
23	Negative	Negative

NSA No serum available

TABLE 12: MYCOBACTERIAL CULTURE RESULTS

ANIMAL NUMBER	MYCOBACTERIAL CULTURE
1	Negative
2	NTC
3	NTC
4	NTC
5	Negative
6	Negative
7	Negative
8	Negative
9	Negative
10	Negative
11	Negative
12	NTC
13	NTC
14	NTC
15	NTC
16	NTC
17	NTC
18	NTC
19	Positive
20	Positive
21	Negative
22	Negative
23	Negative

NTC No tissue cultured

TABLE 13: SUMMARY OF IMPORTANT HISTOPATHOLOGICAL CHANGES

ANIMAL NUMBER	IMMUNE SYSTEM	BONE MARROW	PULMONARY	GASTRO-INTESTINAL	RENAL	CUTANEOUS	OCULAR	SKELETAL MUSCLE	MYOCARDIUM	HEPATIC	CNS	THYROID
1 (N1)	Lnn hy,E,N, M,+C Spl N,E,EMH	↑Cells,E	+++ Gran pneum	Chr gastr SI E + Glossitis	N/A	NTA	N/A	S	+ Myocarditis & degen H	EMH	N/A	NTA
2 (N2)	Lnn hy,E,+C Spl N,E Thy invol	E	+ Interst pneum H	Chr gastr SI E	MGN (GS)	NTA	N/A	+ Myositis S,H	H	N/A	N/A	NTA
3 (N3)	Lnn hy & atr, E,+C,M, GI Spl E	↑Cells,E	+ Interst pneum H	SI E, Cest + Glossitis	MGN (FS)	NTA	+ Ant uveitis	+ Myositis S,H	H	+ React hepat EMH, GI	Sp c haemor	NTA
4 (N4)	Lnn hy,E,+C, M,GI;Spl N,E Thy invol	E,N	+ Interst pneum H	Chr gastr SI E, Cest	N/A	NTA	N/A	+ Myositis S	+ Myocarditis	GI	N/A	NTA
5 (N5)	Lnn atr, E, N, +C Spl N	NTA	+ Interst pneum H	SI E, Cest	N/A	N/A	N/A	S, H, T	+ Myocarditis with degen H	+ React hepat Portal inflam	Mineral of Sp c DM & bvs of CP	N/A
6 (N6)	Lnn hy, E, N, +C, M; Spl fol hy; Thy invol; Ton fol hy,N	E	+ Interst pneum H	Chr gastr SI E, Cest + Colitis	N/A	NTA	N/A	H	+ Myocarditis H	GI	+ WD & Sp c haemor	N/A
7 (PD1)	Lnn hy, E, N, +C Thy invol	NTA	+++ Interst pneu +++ Gran pneum +++ Bronch	Chr gastr Colonic FB penetr	N/A	NTA	N/A	Atr of glossal muscle	+ Myocarditis, H	Portal inflam	Haemor in Cerebel PM & Bst	Lympho thyroiditis
8 (PD2)	Lnn hy, E, +C; Spl fol hy, EMH, pl c; Thy invol; Ton fol atr,N	↑Cells, E	++ Interst pneum H	N/A	N/A	NTA	+ Lympho conjunct	++ Myos with necr & degen Atr glo mus	M/f degen H	N/A	+ M/f mening of sp c	N/A
9 (PD3)	Lnn atr, N, +C, GI Spl fol atr, N, pl c	↑Cells, E, pl c, L,↓ rbc	+++ Gran pneum +++ Bronch + Interst pneum H	St GI, bact, P L/pl ent & p gran;Colon GI; ulc glossitis	MGN (FS);chr inf;CIN;GI	Chr derm; Cellulitis	<i>Trichinella</i> – no reaction	S, H, T	+ Myocarditis H	GI; portal inflam	N/A	N/A
10 (PD4)	Lnn hy & atr, E,+C,M, GI	NTA	++ Interst pneum	L/pl ent; Nemat	N/A	NTA	+ Ant uveitis	Atr glossal muscle	+ Myocarditis with degen H	EMH; GI	+ Cong	Lympho thyroiditis
11 (PD5)	Lnn atr, E, N,+C, Cryst Spl fol atr, pl c	E,N,pl c, L, ↑ myeloid prec	NTA	St Nemat; SI tremat; + Colitis	MGN (FS);+++ Amyloid	NTA	+ Ant uveitis	S, H, T Atr glossal muscle	M/f fibrosis	N/A	N/A	NTA
12 (PD6)	Lnn atr, E, N +C, Cryst, GI	NTA	+ Interst pneum Adenoma H	N/A	N/A	NTA	N/A	NTA	H	GI	NTA	NTA

TABLE 13 (continued): SUMMARY OF IMPORTANT HISTOPATHOLOGICAL CHANGES

ANIMAL NUMBER	IMMUNE SYSTEM	BONE MARROW	PULMONARY	GASTRO-INTESTINAL	RENAL	CUTANEOUS	OCULAR	SKELETAL MUSCLE	MYOCARDIUM	HEPATIC	CNS	THYROID
13 (PD7)	Lnn atr, E Spl fol hy	NTA	++ Interst pneum	NTA	N/A	NTA	NTA	NTA	+ Myocarditis H	Portal inflamm	NTA	NTA
14 (PD8)	Lnn atr, E, N, +C, M, Cryst, GI	NTA	+ Interst pneum	SI E, FB penetr, Nemat	++ Amyloid	NTA	NTA	NTA	H	GI	NTA	NTA
15 (PD9)	Lnn atr, E, +C Cryst	NTA	++ Interst pneum ++Gran pneum	SI Nemat	N/A	NTA	NTA	NTA	+ Myocarditis H	GI	NTA	NTA
16 (PD10)	Lnn atr, +C, Cryst Spl fol atr	NTA	++ Interst pneum	NTA	N/A	NTA	NTA	NTA	+ Myocarditis with m/f degen H	GI	N/A	NTA
17 (PD11)	Lnn atr, +C, Cryst, GI Spl fol atr	NTA	++ Interst pneum + Gran pneum H	NTA	+ Amyloid	NTA	NTA	NTA	S, H	N/A	N/A	NTA
18 (PD12)	Lnn atr, E, N, ++C, Cryst, GI Spl fol atr	NTA	+ Interst pneum	St H + Interstitial pancreatitis	+ Amyloid	NTA	+ Ant uveitis	+ Myositis with degen T	+ Myocarditis H	GI; + portal inflamm	+ WD (Sp c) M/F malacia in Cerebrum	Lympho thyroiditis
19 (PD13)	Lnn atr, N, +C, M, Cryst, GI	↑Cells, E, pl c, L, ↑ myeloid prec	+++ Gran pneum +++ Bronch H, M	SI L/pl enteritis, Cest, M	MGN (FS) GI	Granuloma- tous Cellulitis	Granuloma- tous Panophthal- mitis	+ Myositis with degen T	H	GI; + portal inflamm	+ WD (Sp c)	NTA
20 (PD14)	Lnn atr, N, ++C, Cryst, GI Spl pl c	E, ↑ mature neutrophils	++ Interst pneum	Chr gastr, P	MGN (FS) + Amyloid	Chr derm; pyoderma Cellulitis	N/A	+ Myos with degen & atr S, H, T	H	React hepat; GI; + portal Inflamm	++ WD (Spc)	N/A
21 (PD15)	Lnn atr, E, ++C, Cryst, M Spl pl c	↑Cells, E, pl c, N ↓ myeloid prec	+ Interst pneum	+ Glossitis with superficial bacteria	MGN (FS) + Amyloid	N/A	N/A	S	+ Myocarditis with degen & fibrosis H	GI; + portal inflamm	N/A	N/A
22 (PD16)	Lnn atr, N, E, +C Ton fol hy, +C	E, N, pl c ↓ myeloid prec	+ Interst pneum H	Chr gastr, GI SI E + Colitis, bact	MGN (FS)	N/A	NTA	+ atr, S, H Atr glossal muscle	+ Myocarditis H	GI	N/A	N/A
23 (PD17)	Lnn hy, N, +C Ton fol hy, N Thy invol	↑Cells, E, pl c	N/A	Chr gastritis + Glossitis	N/A	N/A	NTA	+ Myos with degen. S, H Atr glossal muscle	+ Myocarditis with degen H	GI	N/A	Lympho thyroiditis

+	Mild	CP	Choroid plexus	Hepat	Hepatitis	N	Neutrophils	Sp c	Spinal cord
++	Moderate	Cryst	Crystalline material	hy	Hyperplasia	N/A	No abnormalities	Spl	Splenic
+++	Severe	degen	Degeneration	inf	Infarction	necr	Necrosis	St	Stomach
Ant	Anterior	derm	Dermatitis	inflamm	Inflammation	Nemat	Nematodes	T	Trichinella
atr	Atrophy	DM	Dura Mater	Interst	Interstitial	NTA	No tissue available	Thy	Thymic
bact	Bacteria	E	Eosinophils	invol	Involution	P	Protozoa	Ton	Tonsillar
Bronch	Bronchiectasis	EMH	Extramedullary haematopoiesis	L	Lymphocytes	penetr	Penetration	Tremat	Trematodes
Bst	Brain stem	FB	Foreign body	Lnn	Lymph nodes	p gran	Parasitic granuloma	ulc	Ulcerative
bvs	Blood vessels	fol	Follicular	L/pl	Lymphoplasmacytic	pl c	Plasma cells	WD	Wallerian
C	Cystic spaces	FS	Focal segmental	Lympho	Lymphocytic	PM	Pia mater		Degeneration
Cerebel	Cerebellar	gastr	Gastritis	M	Microfilaria	pneum	Pneumonia		
Cest	Cestodes	GI	Granulomatous inflammation	mening	Meningitis	prec	Precursors		
Chr	Chronic	Gran	Granulomatous	M/f	Multifocal	rbc	Red blood cells		
CIN	Chronic interstitial nephritis	GS	Generalized segmental	Mineral	Mineralization	React	Reactive		
Cong	Congestion	H	Hepatozoon	MGN	Membranous	S	Sarcocysts		
conjunct	Conjunctivitis	haemor	Haemorrhage		glomerulonephritis	SI	Small intestine		