



VETERINARIA

RIVISTA DI
SANITÀ PUBBLICA
VETERINARIA

ITALIANA

Supplementary material



Reaction pattern	Functional unit of the tissue	Alteration	Gill				
			w	a	a * w	Σ (a * w)	IOG
Circulatory		Haemorrhage	1	From 0 to 6		ICir	Σ (ICir + IReg + IPro + IInf + ITum)
		Hyperaemia					
		Aneurysm					
			Intercellular oedema		1		
Regressive	Epithelium	Structural alterations	1			IReg	
		Plasma alterations	1				
		Deposits	1				
		Nuclear alterations	2				
		Atrophy	2				
		Necrosis	3				
		Rupture of the pillar cells	0				
	Supporting tissue	Structural alterations	1				
		Plasma alterations	1				
		Deposits	1				
		Nuclear alterations	2				
		Atrophy	2				
		Necrosis	3				
Progressive	Epithelium	Hypertrophy	1			IPro	
		Hyperplasia	2				
	Supporting tissue	Hypertrophy	1				
		Hyperplasia	2				
Inflammation		Exudate	1			IInf	
		Activation of RES	1				
		Infiltration	2				
Tumour		Benign tumour	2			ITum	
		Malign tumour	3				

Table SM I. Illustrative table of the histopathological assessment tool. Gills as an example.

RES : reticuloendothelial system.

This evaluation concerns all the examined organs. which have all undergone the same analysis.

Fish	July		September	
	Z1	Z2	Z1	Z2
1	102	98.5	126.5	109.5
2	136.25	133.75	154.75	141.75
3	128.5	131.5	146.5	133.5
4	98	93	122	105
5	89	88.85	108	95
6	117	110.5	143.5	125.5
7	116	118.5	130.5	120.5
8	82	83	101	88
9	91.5	107	114.5	98.5
10	111	118	135	118
11	10.5	99.5	136	117
12	117.5	107.5	147.5	127.5
13	128.5	125.5	155.5	137.5
14	167	167	189.5	173.5
15	174.5	186.5	196.5	181.5
16	118	107.5	147.25	127.5
17	118	113	142	126
18	102	94.5	128.5	110.5
19	109	99	139	119
20	121.5	112	151	131
Mean	111.89	114.73	140.75	124.31

Table SM II. Average values of the IFishes of the examined organs.

Fish	July		September	
	Z1	Z2	Z1	Z2
Gills	25.1	23.96	30.68	26.95
Kidneys	28.12	27.37	32.98	29.67
Liver	24.83	24	30.06	26.41
Intestines	17.3	17.14	21.02	18.42
Muscle	21.37	19.92	25.98	22.85

Table SM III. Average values of the IOs of the examined organs.

Period	Zone	Organ	ICir	IReg	IPro	IInf	I_Tum
July	Z1	Gills	2.53	15.93	4.91	1.76	0
		Kidneys	2.27	22.95	1.87	1.02	0
		Liver	1.95	19.15	1.65	1.88	0.2
		Intestine	1.35	14.5	1.5	0.31	0
		Muscle	1.22	17.18	1.96	1	0
	Z2	Gills	2.16	15.43	4.41	1.95	0
		Kidneys	1.8	22.45	2.12	1.02	0
		Liver	1.5	18.65	1.87	1.72	0.25
		Intestine	1.2	13.25	1.32	65	0
		Muscle	0.9	16.68	1.56	0.77	0
September	Z1	Gills	3.96	17.43	6.4	2.88	0
		Kidneys	3.7	24.45	2.8	2.02	0
		Liver	3.2	20.65	2.87	3.08	0.25
		Intestine	2.35	16	1.72	0.95	0
		Muscle	2.2	18.68	3.35	1.75	0
	Z2	Gills	3.01	16.43	5.41	2.08	0
		Kidneys	2.75	23.45	2.15	1.33	0
		Liver	2.35	19.65	1.92	2.2	0.2
		Intestine	1.7	15	1.32	0.4	0
		Muscle	1.55	17.68	2.41	1.2	0

Table SM IV. Average values of the lesion indices pattern of the examined organs.

Note: table 03 and 04 are joined in table II in the related article.