

COMMON CAUSES OF CONDEMNATION OF CARCASSES AND ORGANS AT THE IPOH ABATTOIR

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SUMMARY

The common causes of condemnation of organs and carcasses of cattle, buffaloes, goats and pigs slaughtered at the Ipoh abattoir for the years 1983 to 1987 is presented. The liver was the most frequently condemned organ in all the species. Fascioliasis was the main cause of condemnation of the liver. Stress due to the method of transportation were the main cause of carcass condemnation in the porcine. Cysts and nephritis were the major causes of condemnation in the porcine kidney. In the porcine (92.38% were diagnosed as milkspots in the liver. In the goats, congestion was seen in 80.30% of the lungs examined. The rate of condemnation of all species of carcass were small.

INTRODUCTION

Ipoh abattoir is one of the eight abattoirs in Malaysia established by the Division of Veterinary Services and is situated in the State of Perak and serves the district of Kinta. There are also many more slaughter houses operated by the town councils. There are three sections in each abattoir namely cattle/buffalo, goat and pig section. The method of slaughter in the cattle/buffalo and goat section is by the halal or muslim method. Pigs and ruminants are slaughtered at 1.00 a.m. and are brought to the abattoir between 8.00 a.m. - 6.00 p.m. the

previous day. The animals are transported by lorries to the abattoir. In the case of pigs, the animals are caged in rattan baskets. Most of the animals slaughtered are obtained locally. Sometimes cattle are imported from neighbouring country.

MATERIALS AND METHODS

The data recorded in this paper was compiled from meat inspection records for the years 1983 to 1987. Meat inspection is carried out by trained Veterinary Assistants and supervised by a veterinarian. Pathological conditions were diagnosed grossly and condemnations were carried by the veterinarian and the information were recorded on a special format. In suspected detection of a contagious disease, the related specimens were sent to the Veterinary Research Institute Ipoh which is also situated near by for confirmation.

RESULTS AND DISCUSSION

The results of condemnation of organs in cattle, buffaloes, goats and pigs are presented in tables 1 to 3. The percentage of carcasses and organs condemned are calculated as per the following formula:- % of organs/carcass slaughtered = number of organs/carcass condemned / total number of animals slaughtered
The % of total condemned carcass and organs were calculated using the following formula:- % of the total condemnation = number of organs/carcasses condemned for each category / total number of organs/carcasses condemned

TABLE 1
CONDEMNATION OF CATTLE AND BUFFALO
ORGANS AT IPOH ABATTOIR (1983-1987)

Year	1983	1984	1985	1986	1987	Total	% of total slaughter	% of total condemnation
Slaughter Figures	2,548	2,070	1,636	1,757	1,894	9,905		
<u>Reasons for condemnation</u>								
<u>LIVER:</u>								
Cirrhosis	37	18	49	26	99	229	2.31	9.00
Abscess	8	10	7	29	135	189	1.91	7.44
Liver Fluke	253	240	411	379	347	1,630	16.45	64.12
Stomach Fluke	75	23	30	70	168	366	3.69	14.40
Congestion	20	5	10	24	69	128	1.29	5.04
	393	296	507	528	818	2,542	15.65	100
<u>LUNGS:</u>								
Pneumonia	7	15	64	40	115	241	2.43	34.08
Abscess	1	9	17	3	45	75	0.75	10.60
Pleurisy	-	1	24	10	8	43	0.43	6.08
Parasites	5	2	5	3	41	56	0.56	7.93
Congestion	0	14	111	97	54	276	0.78	39.04
Splashing	-	1	3	4	8	16	0.16	2.27
	13	42	224	157	271	707	7.11	100
<u>ESOPHAGUS:</u>								
Sarcocysts	-	245	327	62	193	827	8.34	100
	-	245	327	62	193	827	8.34	100
<u>KIDNEY:</u>								
Nephritis	10	2	29	2	70	113	1.14	34.99
Hydronephrosis	8	5	32	-	26	71	0.71	21.98
Pyelonephritis	-	1	15	-	-	16	0.16	4.95
Cysts	20	17	19	31	36	123	1.24	38.08
	38	25	95	33	132	323	3.25	100

TABLE 2
CONDEMNATION OF SWINE ORGANS
AT IPOH ABATTOIR (1983-1987)

Year	1983	1984	1985	1986	1987	Total	% of total slaughter	% of total condemnation
Slaughter Figures	135,003	169,625	181,392	342,993	224,473	1,053,486		
Reasons for condemnation								
LIVER:								
Milkspots	391	1,213	2,501	1,831	504	6,440	0.61	92.38
Cirrhosis	2	20	20	7	48	97	-	1.39
Fatty Changes	10	8	10	30	40	98	-	1.40
Abscess	24	28	14	29	65	160	0.01	2.30
Liver Fluke	46	44	-	10	20	120	0.01	1.73
Congestion	-	-	-	4	52	56	-	0.80
	473	1,313	2,545	1,911	729	6,971	0.63	100
HEART:								
Pericarditis	105	217	210	410	753	1,695	0.16	90.64
Congestion	1	25	39	30	80	175	0.01	9.36
	106	242	249	440	833	1,870	0.17	100
LUNGS:								
Pneumonia	47	102	204	800	8,575	9,728	0.92	7.39
Abscess	5	2	-	-	6,551	6,558	0.62	4.98
Fleuriay	201	325	101	457	4,514	5,598	0.53	4.26
Parasites	321	427	321	538	9,943	11,550	1.09	8.77
Splashing	11,715	11,480	30,180	32,172	12,680	98,227	9.32	74.60
	12,289	12,336	30,806	33,967	42,263	131,661	12.48	100
KIDNEY:								
Nephritis	6	5	15	87	169	282	0.02	7.58
Hydronephrosis	55	117	112	70	456	810	0.07	21.78
Cysts	7	167	459	898	866	2,397	0.22	64.45
Others	2	6	-	3	220	231	0.02	6.20
	70	295	586	1,058	1,711	3,720	0.33	100
G.I.T:								
Peritonitis	1	-	7	-	8	16	-	14.42
Gastroenteritis	1	2	-	-	-	3	-	2.70
Pimply guts	-	-	-	-	92	92	-	82.88
	2	2	7	-	100	111	-	100
CARCASS:								
Arthritis	20	70	73	87	99	349	0.03	7.28
Bruising	4	13	59	48	107	231	0.02	4.82
Fracture	15	114	102	122	102	455	0.04	9.48
Hernia	-	-	284	249	221	754	0.07	15.72
Wounds	147	262	172	294	418	1,293	0.12	26.95
Abscess	-	-	520	573	622	1,715	0.16	35.75
	186	459	1,210	1,373	1,569	4,797	0.44	100

Bovine

a) organs - The condemnation rate was low. The main organs condemned were the liver and lungs. The rejection of the liver was mainly due to liver fluke infestation which varied in degree and resulted in either total or partial condemnation of the liver. As much as 61.58% of the livers condemned were effected with fascioliasis. This comprises of 16.45% of all the cattle slaughtered. The fluke was identified as *Fasciola gigantica* (P. Loganathan and A. Aziz Hussin 1983). Tham and Sheikh Omar (1981) and Yap et al (1983) also found fascioliasis (88.7%) and (73.8%) respectively at the Shah Alam abattoir in the state of Selangor which is about 250 km from the Ipoh abattoir. Abscesses were seen in 7.15% of the livers condemned. A variety of organisms including *Corynebacterium pyogenes*, haemolytic *Escherichia coli* and Beta-Streptococcus were isolated

from the abscess (P. Loganathan and A. Aziz Hussin 1983).

b) carcass - Very few carcass were condemned as majority of the animals were brought to the abattoir in healthy conditions. There were cases when condemnation were due to extensive transport injuries and death due to transport injury.

Porcine

a) organs - The lungs, kidney, heart and liver were the main organs that were condemned during the inspection. Splashing and haemorrhages (74.60%) were the main cause in lung condemnation probably due to the stunning and sticking methods for slaughter. Other causes of lung condemnation are abscess formation. Most of the kidneys condemned (64.45%) were due to cysts and nephritis. As many as 91% of the heart condemned were due to idiopathic pericarditis. The majority of the livers

TABLE 3
 CONDEMNATION OF GOAT ORGANS
 AT IPOH ABATTOIR (1983-1987)

Year	1983	1984	1985	1986	1987	Total	% of total slaughter	% of total condemnation
Slaughter Figures	1,516	2,413	2,807	2,166	2,228	11,130		
Reasons for condemnation								
LIVER:								
Cirrhosis	-	10	8	5	118	141	1.26	7.65
Abscess	7	4	5	10	85	111	0.99	6.02
Liver Fluke	26	167	375	377	381	1,326	11.91	71.86
Stomach Fluke	-	-	-	-	168	168	1.50	9.11
Congestion	-	-	-	6	93	99	0.88	5.36
	<u>33</u>	<u>181</u>	<u>388</u>	<u>398</u>	<u>845</u>	<u>1,845</u>	<u>16.54</u>	<u>100</u>
HEART:								
Pericarditis	-	-	5	-	61	66	0.59	34.75
Congestion	-	-	-	11	113	124	1.11	65.25
	<u>-</u>	<u>-</u>	<u>5</u>	<u>11</u>	<u>174</u>	<u>190</u>	<u>1.70</u>	<u>100</u>
LUNGS:								
Pneumonia	-	119	-	-	122	241	2.16	13.80
Abscess	7	15	3	19	59	103	0.92	5.90
Congestion	-	257	407	579	159	1,402	12.59	80.30
	<u>7</u>	<u>391</u>	<u>410</u>	<u>598</u>	<u>340</u>	<u>1,746</u>	<u>15.67</u>	<u>100</u>
KIDNEY:								
Nephritis	2	108	170	10	208	498	4.47	51.23
Hydronephrosis	5	37	3	34	106	185	1.66	19.03
Cysts	-	57	98	10	65	230	2.06	23.66
Congestion	-	-	-	8	39	47	0.42	4.84
Abscess	-	-	-	-	12	12	0.10	1.24
	<u>7</u>	<u>202</u>	<u>271</u>	<u>62</u>	<u>430</u>	<u>972</u>	<u>8.71</u>	<u>100</u>

condemned (92.38%) were due to milkspots. In Ipoh abattoir melioidosis has been isolated in the condemned spleen and liver (P. Loganathan and A. Aziz Hussin 1983).

b) carcass - The rate of carcass condemnation at the Ipoh abattoir was very low, this reflects the healthy condition of the animals and also probably that only healthy animals are sent to the abattoir. The main cause of condemnation of pig carcass was heat stress and other causes include pyaemia which is associated with chronic sores at tail, castration wounds and umbilical infections.

Caprine

a) organs - The majority of the livers condemned due to liver fluke (71.80%). Lungs were rejected due to congestion (80.3%). In the kidney nephritis was the main cause of condemnation.

CONCLUSION

Malaysia is free of major enzootic disease such as rinderpest, anthrax in cattle and buffalo and African swine in pigs. There was an outbreak of foot and mouth

disease which has been under control and we are fortunate that condemnation of organs are low in our abattoir and seldom the whole carcass condemned.

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