



Study of the hematological, serum and urine biochemical findings in ill-thrift lambs

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Objectives: ill thrift is a vaguely defined condition with a variety of causes. Cases of ill thrift associated with anemia or scouring should be investigated under the syndromes of anemia or scouring. This study was conducted to evaluate ill-thrift lambs in Kerman, Iran.

Materials & Methods: Fecal, urine and blood samples from 20 ill-thrift lambs were obtained for parasitological examination, urinalysis, hematological and serum biochemical analysis.

Results & Conclusion: Results of present study showed decreasing of RBCs and packed cell volumes which confirmed presence of anemia. Serum biochemical analysis indicated that concentration of Cobalt, Copper, Ferrous and Zinc were changed and could lead to ill-thrift in lambs. Urine analysis and parasitological examination showed no significant changes. On the basis of these findings, the mentioned trace elements should be considered as causative agents in ill-thrift syndrome in lambs.

Keywords: Ill-thrift, Syndrome, Hematological, Lamb, Kerman

Concurrent occurrence of traumatic reticulopericarditis and non-penetrating foreign bodies in a five-month-old calf

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Objectives: Traumatic reticulopericarditis or hardware disease occurs commonly in cattle and occasionally in sheep and goats when sharp metallic objects are ingested accidentally. This disease is characterized by low appetite to anorexia, mild fever, decreased milk production, grinding of the teeth, arching the back, ruminal stasis, tachycardia, muffled heart sounds, distended jugular veins, pericardial sounds, brisket and ventral edema. Hardware disease has high mortality rate and is economically important. The aim of this case report is to show the importance of traumatic reticulopericarditis and non-penetrating foreign bodies problems in young animals.

Materials & Methods: A dead, five-month-old Holstein cross calf was referred to Department of Pathology, School of Veterinary Medicine, Shahrekord University for necropsy. Two weeks ago, this calf was referred to the school clinic due to recurrent bloat. In clinical examinations, there were jugular distention and muffled heart sounds. The necropsy was performed and tissue samples from visceral organs such as liver, heart, lungs, reticulum, and parietal pericardium were fixed in 10% neutral buffered formalin, embedded in paraffin and tissue sections were stained with hematoxylin and eosin.

Results & Conclusion: Macroscopically, ascitic fluid with strands of fibrin was observed in the abdominal cavity. The reticulum wall had necrohemorrhagic foci and a rusty wire penetrated to it. There were numerous fibrous adhesions among reticulum, liver and diaphragm. Non-penetrating foreign bodies such as plastic bags and rope were found in the ruminal contents. A large quantity of yellowish, foul-smelling fluid with caseous necrotic materials was observed in the pericardial sac and the epicardial surface was discolored. The pericardium and epicardium were greatly thickened and fused to each other by fibrous connective tissue and caseous materials in some foci. The cranial lobes of the lungs were hyperemic, edematous and firm and adhered to pericardium. Microscopically, hyperemia, infiltration of inflammatory cells, fibrin fibrils, necrotic tissues and proliferation of connective tissue were seen in the reticulum wall, liver surface, pericardium, and epicardium. This case shows that the potential risk of traumatic reticulopericarditis should be taken into consideration for young animals such as a five-month-old calf.

Keywords: Traumatic reticulopericarditis, non-penetrating foreign bodies, Calf, Pathological findings