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Hemo-biochemical component in dogs' pancreatitis dynamics

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Input: Pancreatitis – aseptic inflammation of pancreas of demarcation character, which is based on necrobiosis processes of pancreatocytes and fermental autoaggression followed by necrosis, glandular degeneration and secondary infection development (patent RU 2305844). Lipidemia – increased content of lipids in blood is one of the main causes of pancreatitis development. The aim of research became - evaluation of therapeutic efficacy of a medicine that based on beta-sitosterol and polyprenyl phosphates (BSPP). Objectives: Twenty sick dogs with diagnosis of pancreatitis and lipidemia served as a material of research. Dogs were divided into 2 groups of 10 animals in each according to the principle of analogues. Pancreatitis therapy of first animal group was carrying out by drugs of protease inhibitor group, H-2 histamine receptors blockers, and also antibioticotherapia. Methods: haematological, biochemical, statistical. Results: Before therapy beginning both groups had an increased hematocrit, number of erythrocytes and hemoglobin. Increased number of leucocytes was marked. After 14-th day therapy all hematological indicators returned to the reference values in both groups of animals. By biochemical research at the beginning of the treatment increased level of a-amylase, pancreatic lipase glucose, cholesterol and triglycerides had been marked. On completion of therapy (2 months) in both groups, indicators of α-amylase and glucose were within reference values. Level of cholesterol and triglycerides had returned to normal by that time in the second group of animals, which indicated the normalization of lipid metabolism. Whereas in the first group of animals these indicators remained high. Discussion: Inclusion in the scheme of therapy in acute pancreatitis protease inhibitors, H-2 histamine receptors blockers and antibiotics don't allow to achieve complete recovery as evidenced by the high content of cholesterol and triglycerides. This promotes further transition of process to a chronic form. Inclusion of BSPP in the therapy in pancreatitis of dogs achieves significant depression of cholesterol and triglycerides in the serum of blood, thereby prevent relapses of disease.

Keywords

Dog; lipidemia; beta-sitosterol and polyprenyl phosphates.