Chronic Pancreatitis in Dogs: More Common Than You Think

Chronic pancreatitis in humans can result in diabetes mellitus and exocrine pancreatic insufficiency (EPI). The condition is considered uncommon in dogs, and its relationship to diabetes mellitus or EPI is unknown. Chronic pancreatitis in dogs is difficult to diagnose without invasive tests, and the true prevalence is unknown. In this study, histologic sections of pancreatic tissue were obtained from 200 dogs at necropsy. A total of 200 samples were placed in the following groups according to histologic findings: chronic pancreatitis (mild, moderate, marked, end stage); acute pancreatitis; pancreatic neoplasia; no abnormalities seen; fibrosis; other; and too autolyzed to interpret, of which there were 49. Of the remaining 151 samples, chronic pancreatitis was found in 34%, acute pancreatitis in 2.6%, neoplasia in 3%, no abnormalities in 22%, fibrosis in 23%, and other changes in 16% (changes due to other diseases; cases with a variety of changes). Three breeds had an increased risk ratio: collies, boxers, and Cavalier King Charles spaniels. When acute and chronic pancreatitis were combined, cocker spaniels (n = 3) had an increased risk ratio. No increased risk ratio was found for West Highland white terriers or Yorkshire terriers, and none of the breeds had a negative (protective) risk ratio for chronic pancreatitis. Of the 51 dogs with chronic pancreatitis, 21 had mild disease, 23 had moderate disease, 6 had marked disease, and 1 had end-stage disease; 57% of cases were mild or moderate and 41% involved all 3 limbs of the pancreas. Chronic pancreatitis was more common in female, middle-aged, and obese dogs. The condition is believed to be uncommon, but this first study to evaluate chronic pancreatitis showed a high prevalence. The authors concluded that the disease is underdiagnosed in primary care practice.

COMMENTARY: The clinical diagnosis of chronic pancreatitis is challenging; in addition, it is commonly underdiagnosed because it is usually subclinical. Historically, chronic pancreatitis was thought to be less common than acute pancreatitis. Although more histopathologic data are needed, historically Yorkshire terriers and miniature schnauzers were believed to be at increased risk for pancreatitis. This paper adds Cavalier King Charles spaniels, collies, and boxers to the list. Increased risk factors include obesity, high-fat diets, and some medications. Other than histopathologic confirmation, there is no definitive way to diagnose chronic pancreatitis. In primary care facilities, the combination of history, physical examination findings, and routine clinical pathology is important to rule out other diagnoses, and radiography, ultrasonography, and pancreatic-specific blood testing are then used to support the diagnosis of pancreatitis. Dietary modification is probably the most important aspect of long-term management.

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