

Faecal Pancreatic Elastase (cE1) in Normal Dogs, Dogs with Chronic Enteritis and with Exocrine Pancreatic Insufficiency

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Aim: To assess its diagnostic value cE1 was determined in faeces samples of healthy dogs, dogs with chronic gastrointestinal diseases and exocrine pancreatic insufficiency (EPI) on a single day or on three consecutive days.

Materials and Methods: The reference-group (n=288) included apparently healthy dogs of 98 breeds. In the control-group (n=50) faecal cE1 was determined in healthy Beagles (n=23), German shepherd dogs (GSD, n=24) and Rough-coated collies (RCC, n=3) with serum cTLI values > 5.0 µg/L. Enteritis-group dogs (n=39) had chronic intestinal signs but cTLI was > 5.0 µg/L. In the EPI-group (n=43) all dogs had cTLI values < 2.5 µg/L. Serum cTLI and faecal cE1 were determined with dog specific tests (TLI-RIA, DPC; cE1-ELISA, ScheBo® • Biotech AG).

Results:

Group	No. of dogs	Samples per dog	cE1-concentrations in µg/g		
			Median	Min	Max
Reference group	288	1	253.5	0	3952.0
Control group	50	3	175.0	1.0	1721.0
	Beagles	23	410.3	111.0	1721.0
	GSD/RCC	27	49.0	1.9	567.0
Enteritis group	39	1	360.0	0	3472.0
		8	262.0	30.0	1694.0
EPI group	43	1	1.6	0	18.0
		32	1.3	0	10.0

Conclusions: Faecal cE1 concentration in normal GSD is on average lower than in normal dogs of different other breeds. The cE1 value in dogs with EPI is significant lower than in normal or enteritis dogs. Causes for marked day to day cE1 variations, low faecal cE1 values in normal and enteritis dogs and cE1 in dogs with subclinical EPI need to be investigated.

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