

A Simple Effective Regimen for Preservation of the Dog With a Pancreatic Fistula.

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Dogs tolerate pancreatic fistulas poorly.¹ In addition to the chronic excoriation of the skin of the abdomen and legs, general physical deterioration is rapid. The anorexia, dehydration, hypochloremia, cachexia and ultimate death can be obviated by refeeding pancreatic juice or by parenteral administration of saline in addition to their regular diet.¹⁻³ The technical difficulties attending the maintenance of dogs with pancreatic fistulas is appreciated by anyone who has worked with these animals.

The author was confronted with a need for dogs with simple Pavlov type pancreatic fistulas which would survive for a prolonged period of time at a level of health compatible with the tolerance of major surgery (gastrectomy).⁴ A simple effective maintenance regimen for these animals was developed, which successfully prevented skin excoriation and preserved the general health and vigor of these animals.

The skin of the abdomen and legs was protected from the irritative effects of pancreatic juice by maintaining the animals in trays of clean, fine, white sand. The dogs soon learned to keep their bellies nestled in this absorptive material, thereby obviating skin excoriation. It was necessary to change the sand twice daily.

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¹ Elman, R., and McCaughan, J. M., *J. Exp. Med.*, 1927, **45**, 561.

² Cowgill, G. R., *J. Biol. Chem.*, 1923, **56**, 725.

³ Allen, J. S., Vermeulen, C., Owens, F. M., and Dragstedt, L. R., *Am. J. Physiol.*, 1943, **138**, 352.

⁴ Kolouch, Fred, unpublished.

TABLE I.
Daily Ration for Dog (Weight 15 kg) with Pancreatic Fistula.

Constituents	Quantity
Raw pork pancreas	150 g
Beef tallow	40 "
Casein	100 "
Sucrose	100 "
Milk	500 "
Cod liver oil	4 cc
Brewers yeast	6 tablets
Vit. C	25.0 mg
Vit. K	1.0 "
Cowgills (2) salt mixture	4.14 g
Sodium bicarbonate	1.5 "
Bone ash	7.5 "
Amphogel	30.0 cc

Diet homogenized and administered by gastric intubation if necessary.

The daily replacement of the water, electrolytes, and sufficient pancreatic enzymes was met by the forced feeding of a ration of a homogenized liquid diet, nutritionally complete, for a dog with a pancreatic fistula. The dietary formula is listed in Table I. When necessary, in anorexic dogs, tube feeding insured complete ingestion of this diet. Antacids were added to prevent development of peptic ulcer incident to the loss of the normal neutralizing effects of pancreatic juice.²

Maintained on the above regimen, 5 of 6 dogs with pancreatic fistulas survived gastrectomy. The mortality in the 6th dog was due to a surgical blunder. Following gastrectomy, survival varied from 3 months to 2½ years. Deprivation of the special regimen with return to ordinary kennel care and rations evoked a dramatic deterioration and ultimate death in all of these gastrectomized dogs.

Summary. (1) A simple kennel and dietary routine for the maintenance of the health and vigor of dogs with pancreatic fistulas is outlined. (2) Pancreatic fistula dogs supported by this regimen tolerated major abdominal surgery (gastrectomy).