Wasting and mortality in beef cattle parasitized by *Eurytrema coelomaticum* in the State of Paraná, southern Brazil

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Abstract

A sporadic wasting syndrome affecting beef cattle herds parasitized by *Eurytrema coelomaticum* is described in the State of Paraná, southern Brazil. The disease was characterized by progressive weight loss, poor body condition despite plenty of good quality forage available, and death. Annual losses ranged from 1 to 3%. The clinical course of the disease varied from 2 to 10 months after the onset of the first clinical signs. At necropsy, one of the three distinct following patterns of lesions were observed: the pancreas was of normal size and color; small, shrunken, white and markedly and diffusely firm (fibrosis); or slightly enlarged and dark with a shriveled capsular surface. Myriads of leaf-shaped trematodes of the genus *Eurytrema* were packed inside multiple dilated ducts with thickened, whitish fibrous walls, or the flukes were embedded in the remaining pancreatic parenchyma. Microscopic findings included extensive loss of the pancreatic parenchyma with replacement fibrosis, intralesional flukes and eggs, and ductal hyperplasia. Inflammatory reaction varied from absent to severe with the presence of a granulomatous reaction around the trematode eggs. One affected animal had high plasma amylase concentration (1580 U/L) suggesting exocrine pancreatic insufficiency. Glucose blood levels were not significantly increased. We suggest that diffuse and marked fibrosis of the pancreas induced by the presence of large amounts of pancreatic flukes is the cause of the sporadic cases of chronic wasting and death of cattle in this geographic area. © 2005 Elsevier B.V. All rights reserved.

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1. Introduction

*Eurytrema* spp. is a pancreatic fluke (Trematoda, Dicrocoeliidae) found in Europe, Asia and South America. It is a common parasite of the pancreatic