

LETTER TO THE EDITOR

RECTAL STRICTURES IN PIGS

SIR: Rectal stricture in pigs is a clinical syndrome that was recognized as early as 1967 in the United States (Gibbons 1967). The precise aetiology of this disease has remained largely unknown. This disease has been associated with *Salmonella typhimurium* infection by some (Wilcock and Olander, 1977) while others believed that strictures are sequelae to rectal prolapse (Smith and Penny 1986). While this syndrome has been reported in countries such as United States (Gibbons, 1967; Lillee *et al.*, 1973), England (Saunders 1974) and Italy (Sidoli *et al.*, 1983), the disease has not been reported in Malaysia. This report places on record the presence of rectal strictures in this country.

The owner of a 300 sow commercial piggery reported sporadic cases of pigs about three to five months developing a sudden onset of abdominal distension followed by progressive emaciation, rough hair coat, watery faeces or constipation with eventual death. An emaciated pig about four months of age, with clinical signs of abdominal distension and stunted growth was euthanized for post mortem examination. On post mortem examination, there was a greatly distended spiral colon. There was mild peritonitis with fibrin tags on the serosal surface of the intestines. There was a dilatation of the descending colon about five cm cranial to the rectal stricture, forming a spherical pouch about 8 cm in diameter (Fig.1). The stricture was a fibrous band, about 3 cm in length just anterior to the rectal mucocutaneous junction. Two tissues were submitted for histopathology; one of the rectal stricture and the other the colonic pouch. The mucosal layer of the rectal stricture tissues appeared normal. However, the submucosa and muscular layers were infiltrated with young fibrous tissues and leucocytes mainly neutrophils and mononuclear cells. The muscle fibres appear to be dispersed randomly by the effect of the infiltration of fibrous tissue and inflammatory reactions in-between the muscle fibres (Fig. 2). The serosal layer was infiltrated with leucocytes, mainly neutrophils. There were fibrin tags at the serosal surface. The colonic pouch tissue consisted of loose connective tissue without inflammatory cell infiltration. The lesions in the rectal stricture appeared to be caused by traumatic injury with no evidence of any complication with bacterial infections. A gram stain done of these tissue sections did not show the presence of bacteria in these tissues.

It has been suggested that rectal strictures are sequelae to enteric salmonellosis (Wilcock and Olander, 1977) or rectal prolapse (Smith and Penny 1986). The histological findings appear to support the belief that at least in this case, the stricture is a response to traumatic injury such as that caused by rectal prolapse.

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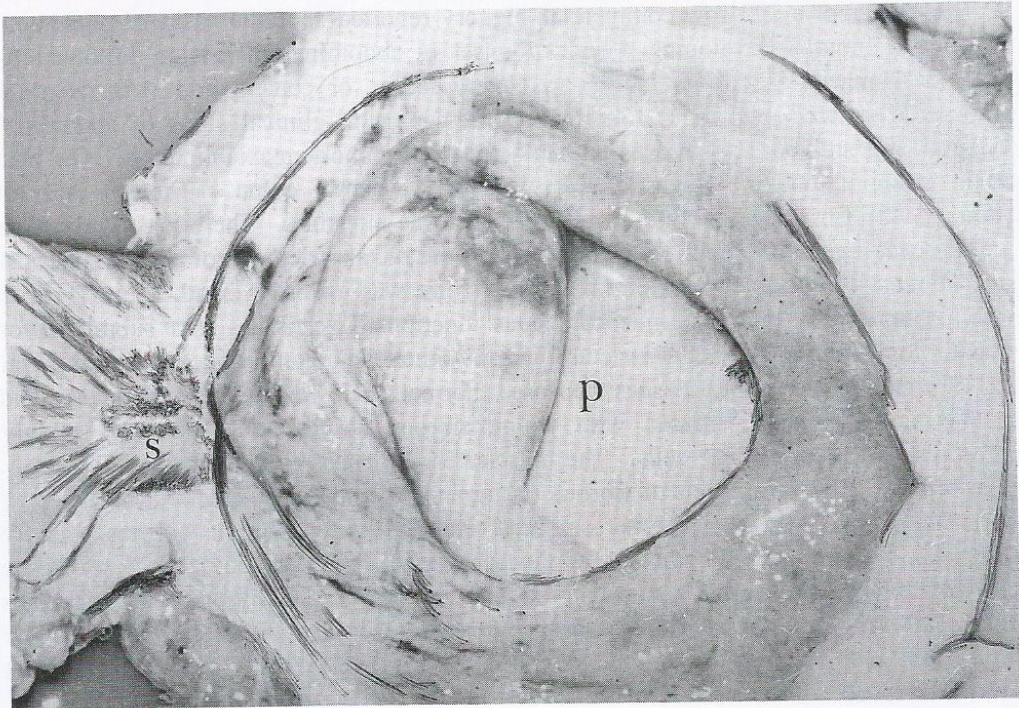


Figure 1. Gross post mortem specimen of a rectal stricture (s) with pouch-like dilatation of the descending colon (p) in a 5-month-old pig with a history of abdominal distension and progressive emaciation.

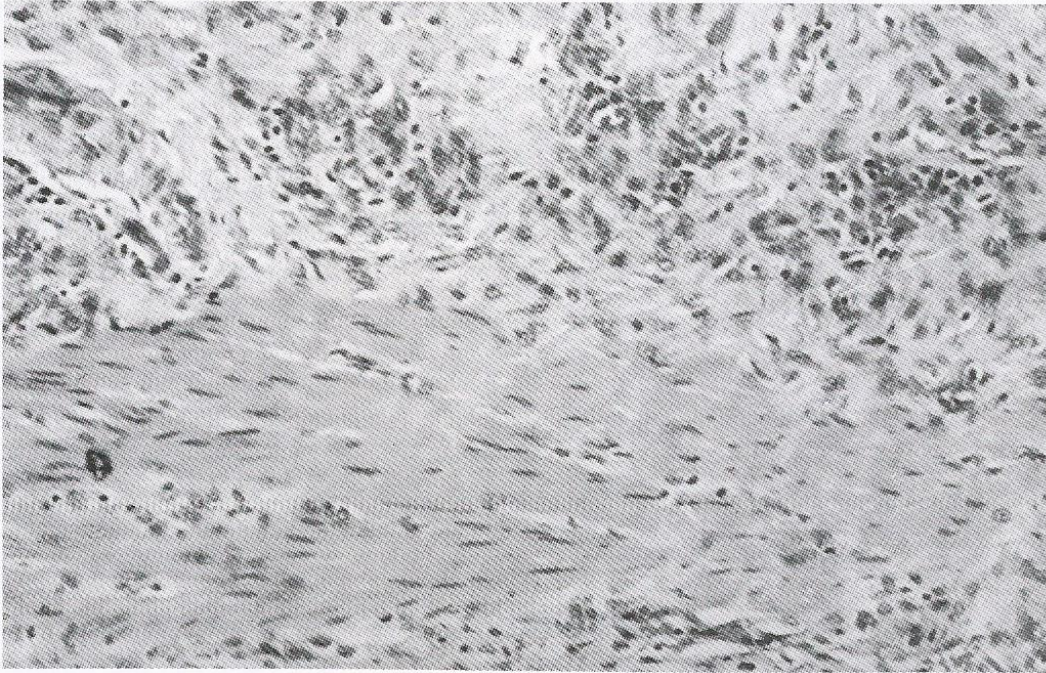


Figure 2. Histological section of the rectal stricture of a 5-month-old pig with a history of abdominal distension and progressive emaciation, showing muscle fibres dispersed randomly by infiltrating fibrous tissue and inflammatory cells.