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Eosinophilic enteritis

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Eosinophils can accumulate at a number of different anatomic sites in the gastrointestinal tract and eosinophilic oesophagitis, gastritis, gastroenteritis, enteritis and colitis have been identified in many species including man, dog, cat, horse and cattle. In all species, these conditions are relatively uncommon. In man, primary eosinophilic gastrointestinal disorders are defined as eosinophil-rich inflammatory conditions that predominantly affect the gastrointestinal tract in the absence of known causes for eosinophilia e.g. drug reactions, parasite infections and malignancy. Eosinophilic infiltration of the gastrointestinal tract may be one manifestation of a more diffuse, infiltrative eosinophilic disease affecting multiple organs. A mini-epidemic of human eosinophilic gastrointestinal disorders (particularly eosinophilic oesophagitis in children) has been noted over the last decade, suspected to be related to allergic and genetic factors.

In the horse, a syndrome of multi-systemic, eosinophilic epitheliotrophic disease has been recognised; this is of unknown aetiology and affects various organs, including the skin and gastrointestinal tract. Eosinophilic infiltration may be confined to the gastrointestinal tract alone and clinical signs of chronic, diffuse eosinophilic enteritis and colitis include weight loss, hypoalbuminaemia, diarrhoea and occasionally colic associated with recurrent colonic impactions. Various protocols have been suggested for the treatment of the diffuse forms of this condition, predominantly involving the long-term use of corticosteroids. Generally the prognosis for diffuse eosinophilic enteritis/colitis is poor.

Focal eosinophilic lesions of the equine gastrointestinal tract can occur secondary to localised infiltration by the fungus Pythium sp. and arrested nematodes. More recently focal, eosinophilic lesions of the small intestine and large colon have been identified, which are of unknown aetiology. Interestingly these lesions do not appear to have been recognised prior to the 1990s. Horses affected by idiopathic focal eosinophilic enteritis (IFEE) present with acute colic and clinical signs consistent with simple obstruction of the small intestine; depending on the duration of small intestinal obstruction, horses may present with distended loops of small intestine on rectal examination and reflux may be obtained on nasogastric intubation. In many cases the peritoneal fluid is normal. At laparotomy these lesions are distinctive appearing as one or multiple red, circumferential mural bands or occasionally as plaques on the antimesenteric border of the gut. Ingesta is usually obstructed at only one of the affected sites (if multiple lesions are present) and this is likely to be due to a combination of physical reduction in lumen diameter and local reduction in intestinal motility due to inflammation. Treatment involves decompression of the small intestine. Provided that the lesion does not severely compromise the lumen diameter, resection is usually unnecessary and most of the lesions will resolve over a few days. Affected horses should be monitored carefully to ensure that if acute re-obstruction does occur in the first few days post operatively, the stomach is decompressed frequently. Focal eosinophilic lesions of the colon present with clinical signs consistent with simple obstruction of the colon and will usually present with elevated concentrations of total protein and leucocytosis in the peritoneal fluid. Local resection of affected colon may be required depending on the appearance of the serosa.

Generally the prognosis for acute, focal eosinophilic enteritis and colitis is better than for the chronic, diffuse forms. These lesions do not appear to recur in affected horses. Focal idiopathic eosinophilic lesions are still a relatively uncommon cause of colic and research on the aetiolopathogenesis continues. Epidemiological investigations suggest that there may be some geographical clustering of IFEE cases and that younger horses are at greater risk.

REFERENCES


