

Cecocolic Intussusception in a Thoroughbred Yearling

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Cecocolic intussusception is a relatively uncommon cause of equine colic,^{1,2} as shown by rare reported cases. This pathology can involve only the apex of the cecum or its body, or the whole cecum with its head, and therefore involves the ileum and a part of the jejunum too. The intussusceptions may present either serious symptomatology and sudden outbreaks or mild periodic colic signs lasting for hours and even days. Some authors cite horses being checked because of recurrent mild colics with a gradual worsening of physical conditions.³⁻⁵

It is not clear how this pathology arises, although tapeworm infection, anthelmintic treatments with organophosphate compounds, vascular compromise by *Strongylus vulgaris* larvae, administration of parasymphomimetic drugs, *Eimeria leuckarti* infection and, lastly, cecal wall abscesses or the presence of lipomas⁴ have been held responsible.

In all reported cases *Anoplocephala perfoliata* infection is the more recurrent constant. This parasite also is held responsible for cecal spontaneous perforation.² *A. perfoliata* seems to cause a catarrhal enteritis with thickening and oedema of the wall. It also seems to cause mucosal ulcerations and tissue granulation in the lesion site with alteration of the organ motility.⁶

History and Clinical Examination

An 11-month-old Thoroughbred male colt was examined because of a violent colic lasting 5 hours that did not respond to any analgesic therapy. The yearling lived in a paddock with another yearling during the day and in a stall during the night. The diet included grass, mixed hay, and oats. Anthelmintic prophylaxis was performed regularly every 3 months, and it had been administered 2 months before with ivermectin. No changes in husbandry were reported. On the colic day, the yearling ate his morning ration of hay as usual. The first signs of pain appeared some hours after he was put in the paddock.

During the physical examination, the horse had serious colic signs, which were partly controlled for a short time by xylazine (1.1 mg/kg); the horse sweated and went on lying down and rolling on his back. The mucous membranes were dark pink. Refill time was 3 seconds, pulse 56, respiratory rate 12, temperature 37.4°C; stethoscopic examination indicated the presence of intestinal sounds in the whole abdominal cavity. Packed cell volume was 41 and PPT 4.5. There was no gastric reflux, and the paracentesis produced abundant yellow, turbid fluid, with total protein of 0.5 gm. Feces were reduced in volume and were soft. Because of the subject's small size, it was possible only to accomplish a superficial rectal examination. Only a few small intestine dis-

tended loops could be palpated. It was not possible to reach the colon and cecum. Because of serious pain, the yearling was immediately subjected to explorative laparotomy, without waiting for further diagnostic checks.

Surgical Therapy

Anesthesia was induced by an intravenous injection of a guaifenesine 8% solution and 1 gm of thiopental sodium. After a ventral midline laparotomy of the horse in dorsal recumbence, the abdominal cavity was explored. The cecum was displaced. Starting the palpation of the ventral band of the cecum at the base of this bowel and moving toward the apex, it was possible to verify an intussusception of a large portion of the cecum inside the right ventral colon.

The intussusception was resolved with some difficulty, by seizing with caution and applying gentle traction to the cecal apex, alternating this manipulation with massage towards oral direction of the right ventral colon part in which the cecum was intussuscepted.

After drawing out the cecum and verifying its conditions, its blood vessels had been ligated near the lateral and medial teniae and the necrotic cecal portion had been amputated after placing intestinal forceps near the cecocolic orifice.

Then the correct position of the other abdominal structures had been verified. The small intestine looked distended because of a paralytic ileus caused by the intussusception. It was massaged emptying its contents within the cecum. The abdominal cavity was closed with 4-layer continuous sutures, using No. 2 chromic catgut for the peritoneum; double No. 2 polyglactin for the linea alba closure; No. 0 polyglactin for the subcutaneous tissue, and Size 6 Supramid for the skin closure.

Immediately after the intussusception resolution, the horse exhibited a sudden, temporary worsening of his physical condition, probably on account of the sudden reabsorption of a large quantity of endotoxins, which caused a drop in blood pressure and rise in the respiratory and pulse rate. The heart beat was strongly arrhythmic. The effect of the endotoxins was perhaps opposed by an intravenous injection of antiendotoxin serum, and flunixin meglumine 0.25 mg/kg administration. Immediately after recovery, the yearling had a postoperative myositis in the right forelimb, which disappeared after 12 hours and did not hinder the standing position and movement.

Postoperative therapy included administration of penicillin G 22,000 IU/kg IM and streptomycin 15 mg/kg IM every 12 hours, flunixin meglumine 0.25 mg/kg IV three times a day, DMSO 100 mg/kg IV twice a day, heparin 40 u/kg SC twice a day, and intravenous ringer lactate solution.