Rectal Tears: Treatment by Repeated Manual Evacuation

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Repeated manual evacuation is a successful technique for the treatment of grade 3B rectal tears. This method should be considered as an alternative to current management techniques. Authors’ address: Dept. of Veterinary Clinical Sciences, Washington State University, Pullman, WA 99164-6610. © 1997 AAEP.

1. Introduction
Rectal tears are potentially fatal injuries that often create an emotionally charged atmosphere with frequent liability concerns. They are technically difficult to evaluate and treat. Methods of treatment include direct suturing, rectal liners, and temporary colostomy. This paper describes a technique of repeated manual evacuation for the treatment of grade 3 rectal tears.

2. Materials and Methods
Between July 1994 and June 1996, four horses were treated for grade 3B rectal tears by using a repeated manual evacuation technique. The age, breed, description of the tear, and treatment prior to presentation were recorded. All horses were restrained in stocks and administered xylazine (1.1 mg/kg IV) and butorphanol (0.1 mg/kg IV) for sedation and analgesia during the initial evaluation of the tear. A caudal epidural was performed to prevent straining during examination, using a 1.5 in. (4 cm) × 18 gauge needle; xylazine (90 mg) diluted in sterile saline to a total volume of 10 ml was used. Following evacuation, the rectal tear was evaluated by palpation and endoscopy. Rectal tears were graded, the size of the defect was estimated, and the distance from the anus to the rectal tear was recorded. All horses had blood drawn and submitted for a complete blood count and chemistry profile and had an abdominocentesis performed. All horses were treated with systemic antibiotics and anti-inflammatories; intravenous fluids were used as needed. The horses were treated with mineral oil and water via nasogastric intubation as needed to maintain soft fecal consistency, and they were held off of food initially and then placed on a low-bulk, pelleted diet. All horses had the rectal tear defect and rectum evacuated every 1–2 h; a caudal epidural was administered as needed to minimize straining during evacuation and the person evacuating used bare-arm palpation with lubrication.

3. Results
Horses ranged in age from 4 to 21 years of age; there were one gelding and three mares. Breeds represented were Quarter Horse cross (1/4), Morgan (1/4), and Arabian (2/4). All three of the mares sustained rectal injury during transrectal reproductive examination; the gelding suffered a rectal tear as a result of a rectal impaction secondary to a tumor within the
wall of the rectum. The three mares were referred to the teaching hospital with suspected tears and were treated with systemic antibiotics prior to referral; the gelding was referred for removal of a rectal melanoma and colic, with the rectal tear being diagnosed during the physical exam after arrival. All three mares were referred to the teaching hospital within 12 h of suspected rectal tear; the gelding was referred 2 days following evaluation of the rectal mass by the referring veterinarian. All four of the horses were diagnosed with a grade 3B rectal tear based on rectal palpation and endoscopy. Three out of four horses had abdominocentesis results that indicated the presence of a suppurative effusion; no fluid could be obtained from the fourth horse. All four horses were treated with systemic antibiotics consisting of potassium penicillin (3/4), gentamicin sulfate (3/4), trimethoprim-sulfa (1/4) or metronidazole (1/4). All four of the horses also received either flunixin meglumine (4/4) or phenylbutazone (1/4). Two horses out of the four exhibited signs of endotoxemia and shock at presentation, consisting of tachypnea, tachycardia, and tacky mucous membranes with evidence of a toxic line. All horses were treated with repeated manual evacuation of the rectum for an average of 1 week. An average of five epidurals were given within the first 72 h of presentation. The average size of the rectal defect was 10 cm in diameter, with the average distance being 20 cm from the anus. All four horses were discharged within 2 weeks of presentation. 1 year following discharge, three out of the four horses were reported to be clinically normal. The fourth horse presented to the teaching hospital 1 year following discharge for acute enterocolitis and was euthanized; the area of the defect palpated normally at that time.

4. Discussion
In the past, grade 3 rectal tears have carried a poor prognosis and could frequently progress from a grade 3 to a grade 4. Grade 3 rectal tears involve all of the layers of the rectum except for the mesorectum (3B) or the serosa (3A); grade 4 tears involve all layers. Other treatment methods have attempted to address this problem by direct repair of the injury or by diverting feces from the defect by either loop colostomy or a rectal liner. These methods require extensive surgical intervention and are associated with significant complications aside from the primary injury. The manual evacuation technique reported in this paper has the advantage of allowing frequent monitoring of the rectal defect, which would allow institution of more invasive treatments if indicated by progression of the lesion. Repeated manual evacuation can be used successfully to manage grade 3B rectal tears.

References and Footnotes

Fort Dodge Laboratories, Inc., Fort Dodge, IA 50501.