Treatment and Prognosis for Horses with Rectal Tears: 83 Cases (1986–1998)

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Prognosis for horses with rectal tears may be higher than has been previously reported. Treatment of rectal tears by direct suturing per rectum has yielded a survival rate higher than has been reported for other techniques and should be considered as an option for repair. Authors’ Address: Dept. of Large Animal Medicine and Surgery, Texas Veterinary Medical Center, Texas A&M University, College Station, TX 77843-4475. © 1999 AAEP.

1. Introduction
Rectal tears continue to be a major source of malpractice suits for veterinarians. Successful management of rectal tears relies on proper first-aid, prompt referral, and selection of appropriate therapy. The purpose of this paper is to provide insight on prognosis of horses with various grades of rectal tears and discuss treatment of cases seen at the Texas Veterinary Medical Center (TVMC).

2. Materials and Methods
Case records of all horses presented to the TVMC between January 1, 1986 and July 1, 1998 and diagnosed with rectal tears were retrieved. Signalment, etiology, grade of tear, and treatment selected was recorded. A grade 1 tear involves just mucosa. Only the muscular layer is disrupted with a grade 2 tear. Grade 3 tears are subclassified into 3a if only serosa is intact, or 3b if they occur dorsally into the mesorectum, while grade 4 tears are full thickness.1,2 Treatments included conservative therapy, temporary indwelling rectal liner (TIRL), colostomy, and direct suture per rectum. When direct suture was elected, it was performed blindly, under epidural anesthesia using a one-handed technique. No specialized instrumentation was utilized. Conservative therapy included some combination of manual evacuation, antibiotics, NSAIDs, and peritoneal lavage. Follow-up information was obtained by telephone interview with owners or referring veterinarians.

3. Results
Eighty-three horses were evaluated for rectal tears during the study period. There were 57 mares, 19 geldings, and 7 stallions. Forty-six were Quarter horses, 19 Arabians, and 10 Thoroughbreds with other breeds represented in small numbers. Most of the tears occurred during pregnancy exams (n = 46), followed by palpation for colic (n = 16), physical exam (n = 6), “other” (n = 5), or unknown (n = 10). Fifteen horses were diagnosed with grade I tears, 3 had grade II tears, 35 had grade III tears (22 IIIa and 13 IIIb), and 30 had grade IV tears.

Ninety-three percent (14/15) of horses with grade I rectal tears were discharged alive (one was euthanized due to an unrelated cause). Medical manage-
ment was instituted in 9/15 horses and consisted of fecal softeners and antibiotics. In the remaining 6 horses, no treatment was given.

Grade 2 tears were not identified in significant enough numbers to draw meaningful conclusions.

Sixty-eight percent (15/22) of horses with grade 3a rectal tears were discharged. Treatment was by direct suture in 16 cases, of which 13 were discharged alive (81%). Two horses with grade 3a tears were treated by a combination of colostomy and direct suture, 1 was discharged alive. Three were treated by TIRL plus direct suturing, 1 was discharged alive. The last horse was euthanized due to economic constraints.

Conservative therapy for grade 3b tears was successful in 6 cases. Direct suturing per rectum was the treatment of choice in 4 cases of which 2 were discharged alive. Of 2 cases managed with TIRL plus direct suturing, 1 was discharged. One case was euthanized due to economic constraints. The overall percentage of horses with grade 3b tears discharged alive was 69.2% (9/13).

Twenty-five horses with grade 4 tears were euthanized at presentation due to fecal contamination of the abdomen. Surgical treatment was attempted in 5 cases of which 2 were discharged alive. One survivor was treated by direct suture plus loop colostomy; the other was treated by direct suturing plus a TIRL.

4. Discussion

A survival rate of 60% for grade 3 tears obtained by combining several retrospective studies has been reported.\(^3\) The survival rate for horses with grade 3 tears in which treatment was instituted was 72.7% (24/33) in this study. The higher survival rate may be due to improved first-aid and increased comfort with direct suture of tears per rectum. Seventy-five percent (15/20) of horses with grade 3 tears treated by direct suturing were discharged. Approximately 60% success for horses has been reported for horses with grade 3 tears treated by colostomy.\(^3\) Several advantages of direct suture over colostomy procedures include increased survival, decreased cost, avoidance of general anesthesia, and no second surgery required.

Deciding which treatment modality to select depends on experience of the individual, and the nature of the tear. Direct suturing per rectum is technically difficult to perform, but appears to have a higher success rate when compared to fecal diverting techniques. In closing, the prognosis for most horses with grade 1, 2, or 3 rectal tears receiving adequate first-aid and early referral is good. In some instances, repair of grade 4 tears may be warranted.

References