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Introduction

Pelvic flexure enterotomy are commonly performed in horses. Although it is a relatively straightforward surgery several complication may arise, some of them even fatal.In literature the technique to close the pelvic flexure enterotomy seems somehow standardized to a double layer handsewn pattern.We hypothesized that boarded veterinary surgeons would have received a standardized education, especially on procedures were little variation of techniques has been published.Aim of this study is to evaluate if does exist a uniformity of techniques currently used by ECVS and ACVS Diplomates for pelvic flexure enterotomy closure.

Materials and methods

A web-based survey was conducted among 172 ECVS and 322 ACVS diplomates.The survey had 9 questions, aimed to determine the surgical technique used and the measures taken by the surgeon to minimize the contamination of the surgical site.

Results

Responses were obtained from 130 surgeons. A total of 23 different techniques (in terms of suture patterns and knots used) Monofilament suture material was used by 63.8% of surgeons, multifilament by 30.8%. Preferred size was USP 2-0 followed by USP 0 and 3-0. A double layer suture pattern was chosen by 100% of participants: 60.8 % chose a full thickness oversewn by an inverting pattern.The 21.5% chose a double inverting suture pattern. The surgeon's knot was the first choice to secure the suture line, followed by the square knot. While the 81.5% of surgeons considered negligible the contamination caused by the suture material, the 58.3% of surgeons employed methods to minimize the contamination due to suture material in the making of the second layer.

Discussion

The most common suture pattern used was a simple continuous full thickness oversewn with a Cushing suture pattern.A large number of surgeons uses a double inverting suture pattern, that has been described only once in horses and associated with postoperative bleeding. The surgeon's knot was the most used, with the square knot representing the second choice. None of the knots mostly employed(surgeon's or square) is considered the ideal knot to secure a continuous suture with monofilament suture material.Although the contamination given by the suture material in the second layer was considered negligible from the majority of surgeons, more than half of the participants employed measures to reduce this contamination. From the results of this survey, appears that many surgeons are indeed concerned about contamination given by suture materials and suture techniques.Further, information gained from this survey may assist surgeons in training and may help in promoting a large clinical trial to assess complications.