

Evaluation of Belt-loop Gastropexy for Surgical Treatment of Gastric Dilation - volvulus

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Introduction: To prevent the recurrence of GDV, various treatments of GDV has been developed and used. These treatments include decompression and derotation of the stomach, assessment of gastric or splenic compromise and permanent fixation of the stomach. One study reported a 92% reduction in the risk of recurrence of GDV following gastropexy. Fixation methods for the stomach include belt-loop gastropexy, circumcostal gastropexy, incisional gastropexy, right-sided tube gastropexy. The aim of this report is to provide the result of belt-loop gastropexy, which is one of surgical treatments of GDV.

Materials and methods: 5 cases referred by Veterinary Medical Teaching Hospital, Konkuk University were performed by circumcostal and belt-loop gastropexy in GDV. The mean age was 8.4 years and the mean time from onset of clinical signs to surgery was 5.5 hours. All dogs were pretreatment with fluid therapy and gastric decompression, correction of gastric malpositioning. Three affected dogs were then treated by belt-loop gastropexy and circumcostal gastropexy were performed for other dog.

Result: 4 dogs which were treated with gastropexy in 5 hours after onset of clinical signs were recovered, and no recurrence were found. One dog, which was referred in 24 hours after the onset of clinical signs, was euthanized .

Clinical relevance: Although circumcoastal gastropexy showed a stronger adhesion than other techniques, this technique is difficult to perform and the rib fracture can be occurred during the treatment. However, the belt-loop gastropexy is much easier and quicker to perform compared to the circumcoastal gastropexy. Also the results of previous three GDV cases, which were treated by the belt-loop gastropexy, showed that the prognosis was as good as the circumcoastal gastropexy and no recurrence was found. Further prospective studies with large number of cases and long term follow-up may help identify the recurrence rate of GDV after belt-loop gastropexy.

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