

Gastropexy in Animals: A Comprehensive Exploration of Surgical Intervention for Gastric Dilatation-volvulus (GDV)

Ruby Roberts^{*}

Department of Veterinary Pathobiology, Purdue University, USA

DESCRIPTION

Gastric Dilatation Volvulus (GDV), commonly known as bloat or twisted stomach, is a life-threatening emergency that primarily affects large and deep-chested dog breeds, but can also occur in other animals. The condition involves the stomach filling with gas and twisting on its axis, leading to severe consequences such as restricted blood flow, tissue damage, and shock. Gastropexy, a surgical procedure involving the attachment of the stomach to the abdominal wall, has proven to be an effective preventive measure against GDV. This article aims to provide a comprehensive exploration of gastropexy in animals, encompassing the anatomy, pathophysiology of GDV, surgical techniques, postoperative care, and the broader implications for animal health. Understanding the normal anatomy and physiology of the stomach is crucial to appreciate the complexities that contribute to GDV. In canines, the stomach is a muscular organ situated in the abdominal cavity, positioned between the esophagus and the small intestine. It is divided into regions, including the cardia, fundus, body, and pylorus. The canine stomach is characterized by its elasticity, allowing it to expand to accommodate varying volumes of ingested food and gas. However, this elasticity can become a liability in certain situations, leading to the development of GDV. Factors such as breed predisposition, age, genetics, and feeding practices contribute to the risk of GDV. GDV typically occurs when the stomach fills with gas and becomes distended (gastric dilatation). Subsequently, the distended stomach can twist on its axis (gastric volvulus), resulting in a life-threatening condition. The twisting of the stomach obstructs both the entry and exit, leading to compromised blood circulation, tissue ischemia, and necrosis. The severity of GDV can escalate rapidly, causing shock, organ failure, and ultimately death if not

promptly addressed. The accumulation of gas in the stomach can result from the ingestion of large amounts of food, rapid eating, or the swallowing of air. Bloat alone can be uncomfortable for the animal but becomes a critical issue when accompanied by volvulus. The twisting of the stomach can occur spontaneously or as a result of gastric dilatation. Once the stomach twists, blood vessels become compressed, impeding blood flow to the stomach wall and surrounding organs. Certain factors increase the likelihood of GDV, including breed predisposition (large and deep-chested breeds), age (middle-aged to older dogs), a history of GDV, and a familial predisposition. Given the lifethreatening nature of GDV, preventive measures are crucial, especially in at-risk breeds. Gastropexy, a surgical procedure that involves attaching the stomach to the abdominal wall, aims to prevent the twisting (volvulus) component of GDV. The objective is to secure the stomach in a fixed position, reducing the risk of torsion and mitigating the severity of the condition. Prophylactic gastropexy is performed as a preventive measure in at-risk breeds that have not yet experienced GDV. It is often recommended during routine spaying or neutering procedures, taking advantage of the abdominal access already established for these surgeries. In cases where an animal presents with GDV, an emergency gastropexy may be performed alongside decompression of the stomach. While the primary focus is on addressing the immediate life-threatening situation, the gastropexy helps prevent future episodes.

ACKNOWLEDGEMENT

None.

CONFLICT OF INTEREST

None.

Received:	29-November-2023	Manuscript No:	IPJVMS-23-19230
Editor assigned:	01-December-2023	PreQC No:	IPJVMS-23-19230 (PQ)
Reviewed:	15-December-2023	QC No:	IPJVMS-23-19230
Revised:	20-December-2023	Manuscript No:	IPJVMS-23-19230 (R)
Published:	27-December-2023	DOI:	10.36648/2574-2868.7.4.35

Corresponding author Ruby Roberts, Department of Veterinary Pathobiology, Purdue University, USA, E-mail: robertsruby@purdue.edu

Citation Roberts R (2023) Gastropexy in Animals: A Comprehensive Exploration of Surgical Intervention for Gastric Dilatation-volvulus (GDV). J Veterinary Med. 7:35.

Copyright © 2023 Roberts R. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.