

**UNIVERZITET U SARAJEVU - VETERINARSKI FAKULTET**



## **Gastrična dilatacija i volvulus pasa**

Završni rad

Edin Zubača

Mentor: prof.dr Alan Maksimović

Sarajevo, juli 2026. godine

**UNIVERSITY OF SARAJEVO - VETERINARY FACULTY**



**Gastric Dilatation and Volvulus in Dogs**

Diploma Thesis

Edin Zubača

Mentor: prof.dr Alan Maksimović

Sarajevo, July 2026.

## SAŽETAK

Gastrična dilatacija i volvulus predstavlja hitno, akutno stanje pasa, karakteriše se prekomjernom dilatacijom želuca, koje pritom prati i volvulus, tačnije rotacija želuca oko vlastite osi između 90 i 360 stepeni. Uslijed rotacije želuca, dolazi do kompresije velikih krvnih sudova, posljedično tome nastaje ishemija, zatim prekid peristaltike u tankim i debelim crijevima, nemogućnosti prolaska sadržaja kroz jednjak, što za sobom vuče niz komplikacija, prvenstveno po gastrointestinalni sistem, zatim respiratorni, kardiovaskularni, kao i urinarni sistem. Opisane promjene i vrlo moguće komplikacije različitih sistema, čine ovo oboljenje po život opasnim, posebno kod predisponiranih pasmina, Great Dane, Bloodhound, Rottweiler, Newfoundland, Collie, Akita i mnoge druge. Pošto mehanizam nastanka još u potpunosti nije poznat, utvrđeni su faktori rizika uključujući način držanja životinja, ishranu, kao i već postojeća patološka stanja, pored mogućnosti nastanka GDV-a kod velikih pasmina, posebno onih sa duboko postavljenim grudnim košem, dokazane su i raznolikosti u nastajanju GDV-a, između spolova, kao i različitih starosnih kategorija. Vlasnicima predisponiranih pasminama preporuka je provođenje preventivne gastropeksije, kao i prepoznavanje znakova GDV-a na vrijeme, u cilju pružanja terapije što prije moguće. Znakovi GDV-a uključuju neproduktivno povraćanje, distenziju abdomena, znakove bolnosti i nemira pasa, znakovi šoka, svakako da labaratorijski se očekuju povišena koncentracija laktata, poremećaj acido-bazne ravnoteže, neutrofilija/neutropenija, hipoglikemija, često kao krajnji ishod šoka. Terapija uključuje obnovu perfuzije, dekompresiju želuca, anesteziju za eksplorativnu laparotomiju, derotaciju i dekompresiju želuca, resekciju nefunkcionalnog/nevitalnog tkiva, gastropeksiju, kao i postoperativna njegu i praćenje.

Ključne riječi: pas, gastrična dilatacija-volvulus, gastropeksija, terapija

## SUMMARY

Gastric dilatation and volvulus represents an urgent, acute condition in dogs, characterized by excessive gastric dilatation, accompanied by volvulus, more precisely rotation of the stomach around its own axis between 90° and 360°. As a result of stomach rotation, large blood vessels are compressed, consequently leading to ischemia, then cessation of peristalsis in the small and large intestines, inability of content to pass through the esophagus, which brings a series of complications, primarily affecting the gastrointestinal system, then the respiratory, cardiovascular, and urinary systems. The described changes and highly possible complications of different systems make this disease life-threatening, especially in predisposed breeds such as Great Dane, Bloodhound, Rottweiler, Newfoundland, Collie, Akita, and many others. Since the mechanism of development is not yet fully known, identified risk factors include housing conditions, diet, as well as pre-existing pathological conditions. In addition to the possibility of GDV occurrence in large breeds, especially those with deep-chested conformation, GDV has been shown to vary between sexes and different age categories. Owners of predisposed breeds are recommended to perform preventive gastropexy, as well as to recognize GDV signs on time, in order to provide therapy as soon as possible. GDV signs include unproductive vomiting, abdominal distension, signs of pain and restlessness in dogs, signs of shock; laboratory findings are expected to show elevated lactate concentration, acid-base balance disturbances, neutrophilia/neutropenia, hypoglycemia, often ending in shock. Therapy includes restoration of perfusion, stomach decompression, anesthesia for exploratory laparotomy, derotation and decompression of the stomach, resection of non-functional/non-viable tissue, gastropexy, as well as postoperative care and monitoring.

Keywords: dog, gastric dilatation-volvulus, gastropexy, therapy