



Introduction

- ✓ Cholecystectomy is the treatment of choice for various biliary pathologies in dogs.
- ✓ Gallbladder mucocele is the most frequent pathology requiring this intervention.
- ✓ The use of laparoscopy is already an established part of current biliary surgery.

Materials and Methods

Literature review of articles (2000-2026). Sources: PubMed, Google Scholar, UAB Library.

Literature search

Articles in English, Spanish, and Catalan on canine cholecystectomy.

Keywords

Cholecystectomy laparoscopic dog, benign gallbladder disease dog

Inclusion criteria

Direct or indirect comparative studies.
Both techniques in canids.
Mortality and recovery data.

Comparison between laparotomy and laparoscopy for cholecystectomy in dogs

Objectives

- ✓ To conduct a comparative literature review between the two surgical techniques for cholecystectomy.
- ✓ To analyze the safety and clinical outcomes of laparotomy versus laparoscopy.
- ✓ To determine the technique of choice based on the patient's clinical status and the nature of the biliary pathology.

Methodology

Total references found	14.293
Total references consulted	36
Total references used	17

Surgical Outcomes

Stress markers

Physiological response

Laparoscopy: lower increase in **cortisol** and **IL-6**; milder inflammatory response.

Surgical Time

Laparoscopy: 51-180 min.
Laparotomy: 10 min **faster**.

Comparative Results

Conversion Rate

Early studies: 25-30%.
Recent studies: 4-8.8%. Improvement due to the learning curve.

Hospitalization

Laparoscopy: **24-96h** (mean 27h).
No differences in cases of conversion.

Mortality Rate

Laparoscopy: 5-5,2% mortality.

Laparotomy: **21%** mortality.

Laparoscopy resolution in **1 dia**.
Laparotomy: **7 days** (p=0,047).

Lower incidence of ileus and reduced need for analgesia.

Clinical Implications

Significant reduction in mortality: 5% (laparoscopy) vs. 21% (laparotomy).

Further prospective studies are needed.

Laparoscopy offers better outcomes in uncomplicated cases, with **less pain** and a **faster recovery**.

Conclusions

Laparoscopy is the technique of **choice** for uncomplicated biliary diseases: it reduces surgical stress and accelerates recovery.

Laparotomy remains **indispensable** for complex cases, ruptures, or EHB (Extrahepatic Biliary Tract) complications. The conversion rate is a clinical decision.

Both techniques are **complementary**, depending on the **complexity** of the clinical case.