

Case Report

Case Report: Intestinal Ligation Mimicking Ureteral Ligation After Ovariohysterectomy in an 11-Month-Old Dog

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Received: 28 August 2023; **Accepted:** 05 September 2023; **Published:** 09 September 2024

Citation: Surya Kumar, Siwo de Kloet. Case Report: Intestinal Ligation Mimicking Ureteral Ligation After Ovariohysterectomy in an 11-Month-Old Dog. Archives of Veterinary Science and Medicine 7 (2024): 14-16.

Abstract

This case report describes an unusual presentation of intestinal ligation that mimicked ureteral ligation following an ovariohysterectomy in an 11-month-old female dog. The clinical signs, diagnostic imaging, surgical findings, and postoperative management are discussed. This case highlights the importance of thorough diagnostic evaluation in postoperative patients to differentiate between potential complications.

Keywords:

Female dog; Intestinal Ligation; Mimicked Ureteral Ligation

Introduction

Ovariohysterectomy (OHE) is a common surgical procedure performed in female dogs for various reasons, including population control and prevention of reproductive diseases. While complications following OHE are relatively rare, they can include hemorrhage, infection, and organ injury. This report presents a case of intestinal ligation that was initially misdiagnosed as ureteral ligation, emphasizing the need for careful postoperative assessment and imaging.

Case Presentation

An 11-month-old spayed female Labrador Retriever was presented to the veterinary clinic for evaluation of vomiting, lethargy, and abdominal distension three days after undergoing an elective OHE. The dog had a history of normal preoperative health and was vaccinated and dewormed appropriately.

Clinical Examination

On physical examination, the dog was noted to be dehydrated, with a body temperature of 102.5°F (39.2°C), a heart rate of 120 beats per minute, and a respiratory rate of 30 breaths per minute. Abdominal palpation revealed a tense, painful abdomen with a palpable mass in the cranial abdomen. The dog exhibited signs of discomfort when the abdomen was manipulated.

Diagnostic Imaging

Abdominal radiographs were obtained, revealing a distended intestinal loop with a gas-filled appearance, suggestive of an obstruction. To further evaluate the condition, an abdominal ultrasound was performed, which indicated a possible ureteral obstruction due to a dilated ureter and hydronephrosis on the right side. The left kidney appeared normal.

Differential Diagnosis

The differential diagnoses included:

- Ureteral ligation or obstruction
- Intestinal obstruction
- Peritonitis
- Hemorrhage or hematoma formation

Surgical Intervention

Given the clinical signs and imaging findings, exploratory laparotomy was performed. Upon entering the abdominal cavity, the surgical team noted significant distension of the small intestine. Further exploration revealed that a segment of the jejunum had been inadvertently ligated during the OHE procedure, leading to ischemia and subsequent obstruction.

The ligature was carefully removed, and the affected segment of the intestine was assessed for viability. Fortunately, the intestinal tissue appeared healthy, and no resection was necessary. The abdomen was lavaged with sterile saline, and the incision was closed in layers.

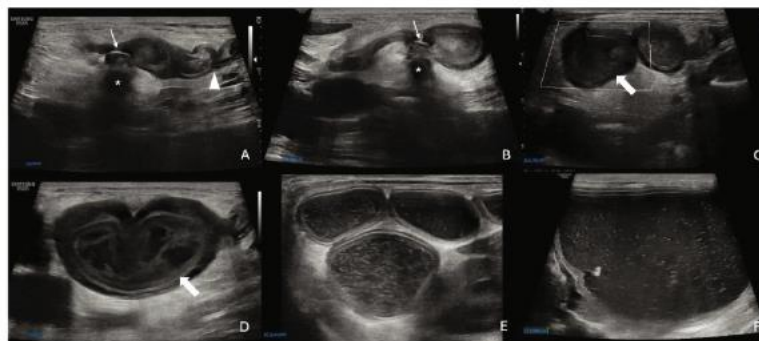


Figure 1: (A–F) Ultrasonographic still images of the gastrointestinal tract of the same patient

Postoperative Management

Postoperatively, the dog was monitored closely for signs of recovery. Intravenous fluids were administered to address dehydration, and analgesics were provided for pain management. The dog was transitioned to a soft diet 24 hours post-surgery and showed gradual improvement in appetite and activity levels.

Follow-Up

The dog was discharged from the hospital two days post-surgery with instructions for continued monitoring at home. A follow-up appointment was scheduled for one week later, during which the dog was found to be recovering well, with no signs of complications.

Discussion

This case illustrates the potential for surgical complications following OHE, particularly in young dogs. The initial misdiagnosis of ureteral ligation highlights the importance of thorough diagnostic imaging and clinical evaluation in postoperative patients. Intestinal ligation can occur due to inadvertent ligation of the intestinal segment during surgery, leading to significant morbidity if not identified promptly.

In this case, the timely surgical intervention and careful management of the postoperative period contributed to a successful outcome. Veterinary practitioners should remain vigilant for signs of postoperative complications and utilize appropriate imaging techniques to guide diagnosis and treatment.

Conclusion

Intestinal ligation mimicking ureteral ligation is a rare but significant complication following ovariohysterectomy in dogs. This case underscores the importance of thorough postoperative evaluation and the need for a high index of suspicion for potential complications in surgical patients. Early recognition and intervention are crucial for a favorable prognosis.

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