

INTRODUCTION

Septic peritonitis is a potentially fatal condition characterized by inflammation of the peritoneum, usually secondary to bacterial or chemical contamination of the abdomen. It is a common pathology in veterinary hospitals, but the protocols to be followed are not very clear.

OBJECTIVES

- To carry out a bibliographic research on septic peritonitis in dogs and to compile the recommended procedures of the experts.
- To determine which surgical treatments are currently the most commonly used.
- To learn about innovative surgical techniques potentially applicable in dogs.



Figure 1: Dog with suspected peritonitis. Courtesy of Narcís Ramon Guillen (Hospital Veterinari Santa Susanna).

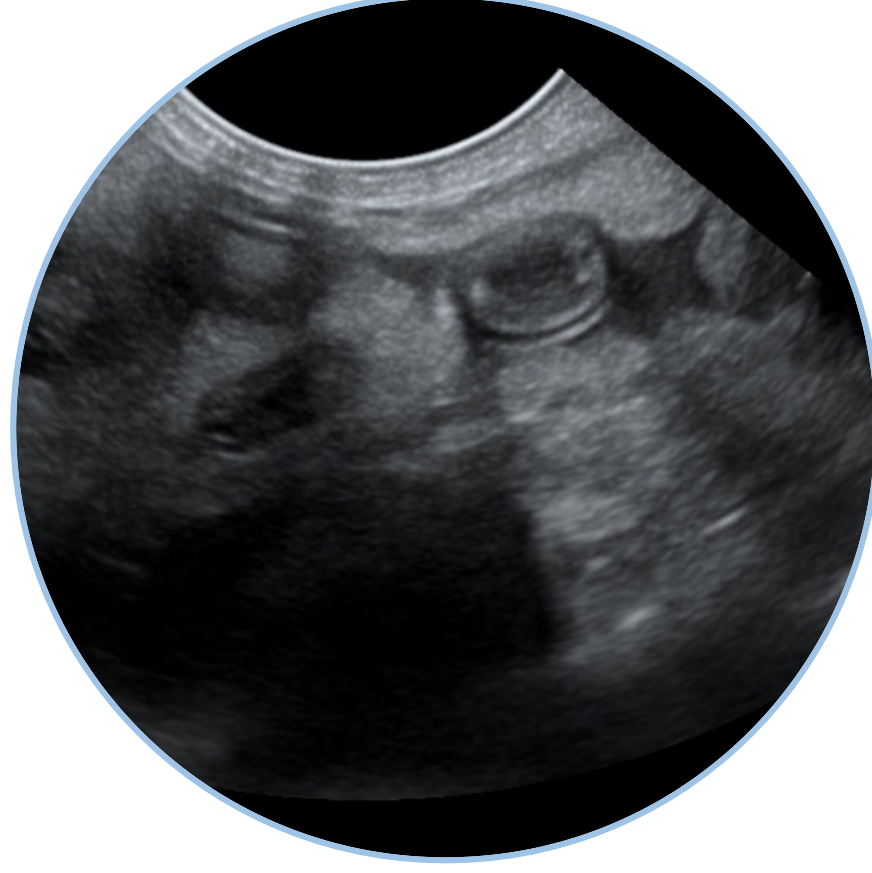


Figure 2: Abdominal ultrasound with suspected peritonitis. Courtesy of Narcís Ramon Guillen (Hospital Veterinari Santa Susanna).

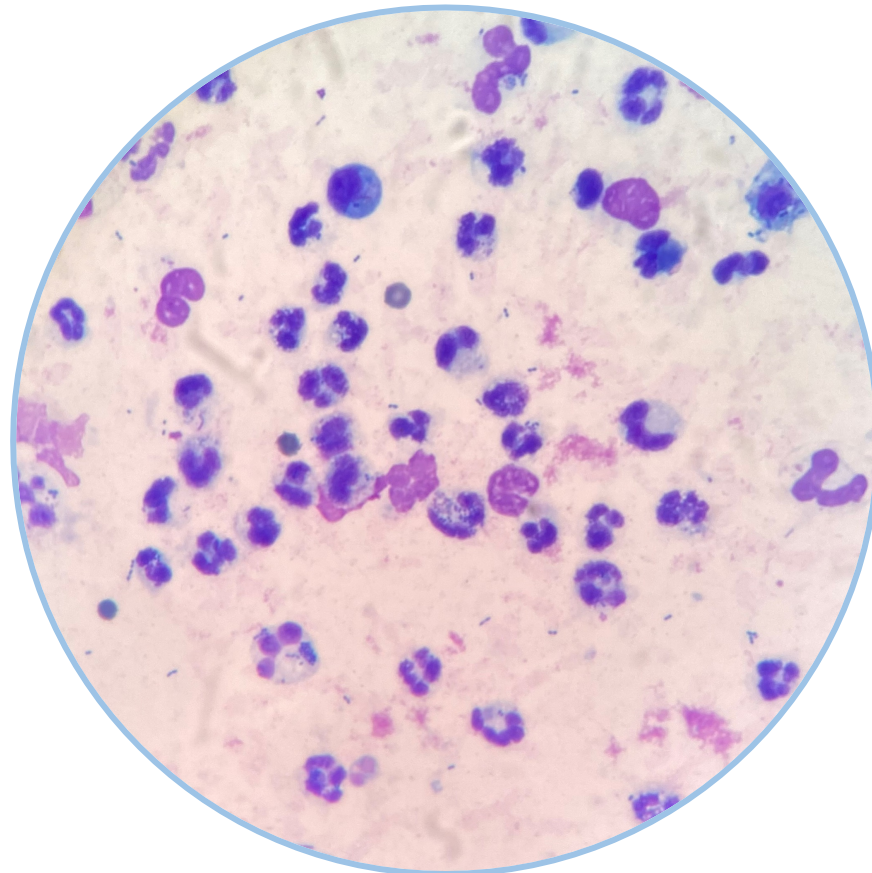


Figure 3: Cytology of peritoneal fluid with septic peritonitis. Courtesy of Narcís Ramon Guillen (Hospital Veterinari Santa Susanna).

- Stabilise:**
- Fluidotherapy
 - Antibiotics
 - Pain control
 - Oxygen supplementation

**Exploratory laparotomy
+
Abdominal lavage**

Is it found the primary cause?

No

Yes

Proceed to solve it

Proceed to drain
the abdomen

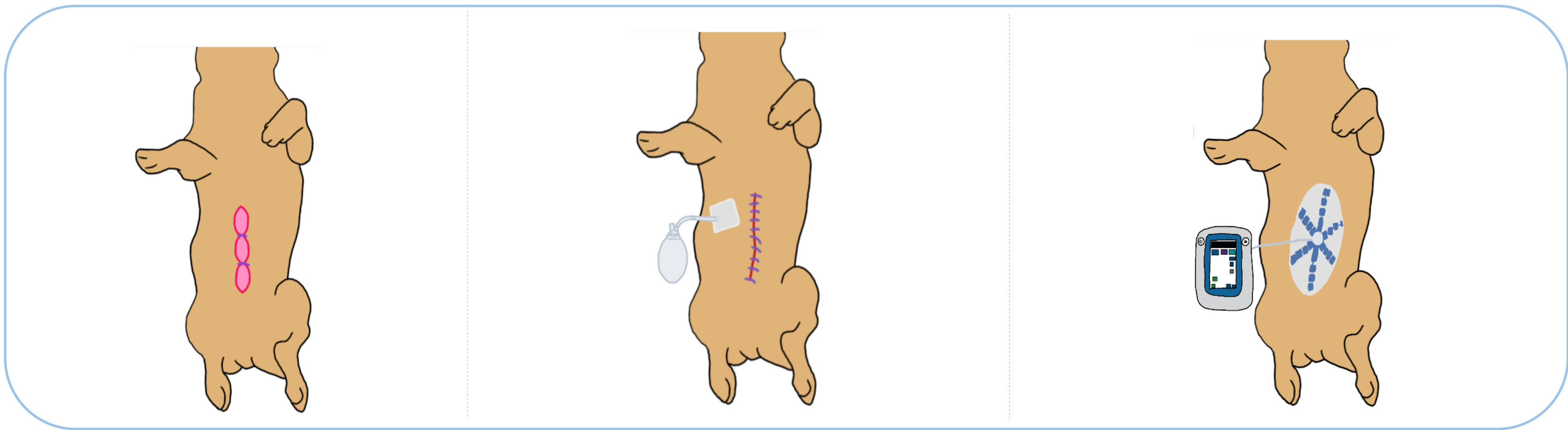


Figure 4: Representation of the different drains that can be applied in septic peritonitis.

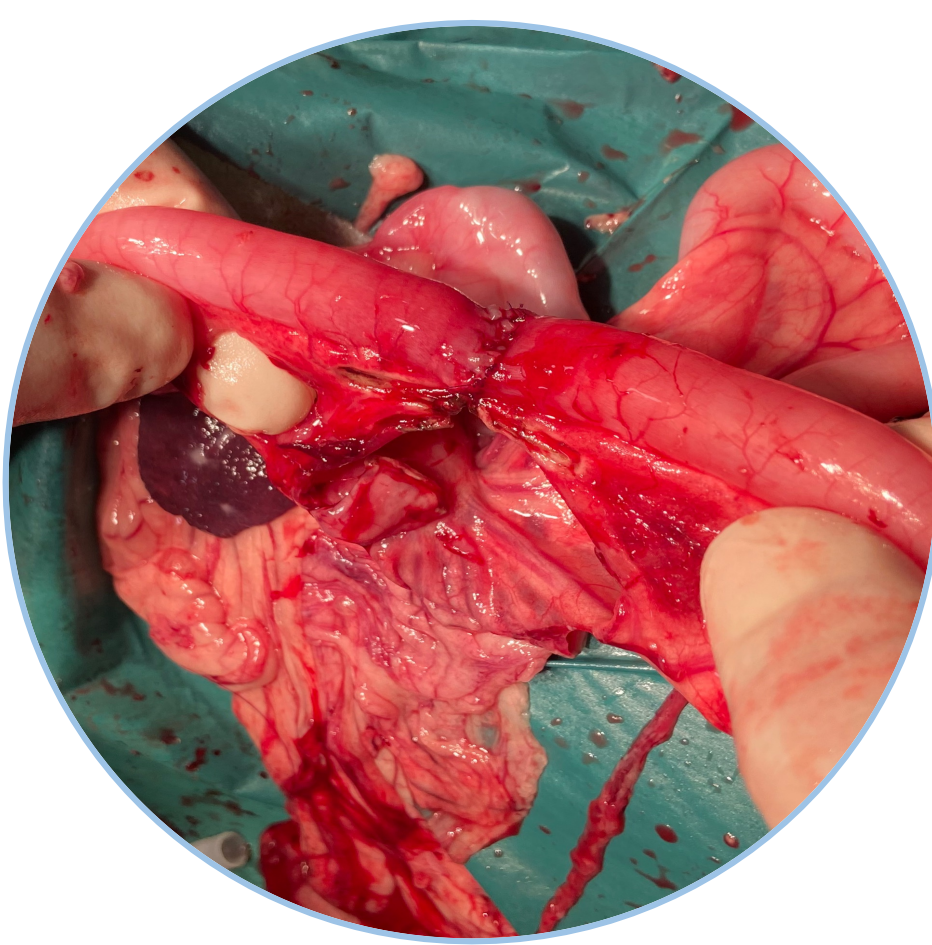


Figure 5: End-to-end enterectomy in a perforated intestine. Courtesy of Narcís Ramon Guillen (Hospital Veterinari Santa Susanna).

Table 1: Comparison of the different abdominal drainage techniques.

Drainage	Passive open abdominal	Closed-suction	Negative pressure abdominal
Indication	Exudative effusions	Serous effusions	Generalised peritonitis
Technique difficulty	Very easy	Easy	Difficult
Necessary material	Sutures, sterile gauze	Suture, closed suction drain	Dressing kit, Vac Ultra
Nosocomial infection susceptibility	Elevated	Medium	Rare
Needs sedation post-cx	Yes	No	No
Needs second surgery	Yes	No	Yes

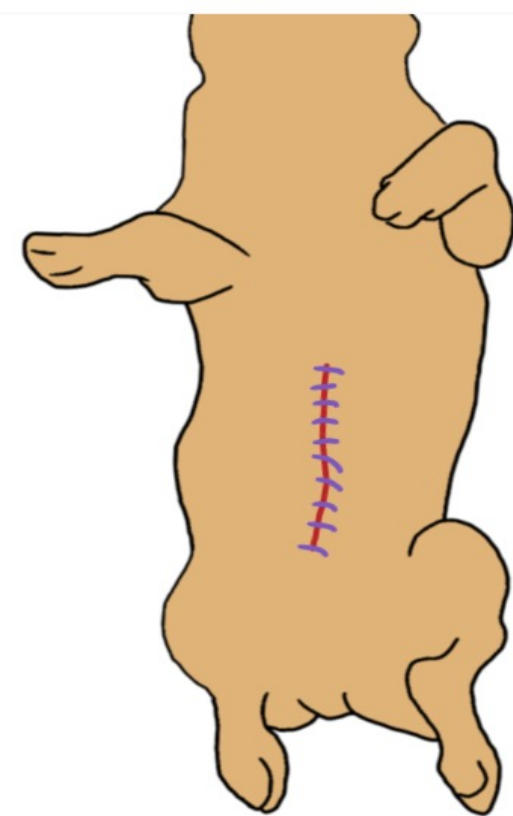


Figure 6: Representation of the primary closure to be applied when the primary cause has been remedied.

CONCLUSIONS

- The treatment of choice for septic peritonitis is surgery, although it will be necessary to stabilise the animal prior to surgery.
- On the one hand, when the primary cause is localised, primary abdominal closure is recommended. On the other hand, when the primary cause has not been found, it will be necessary to put an abdominal drain in place for further lavage.
- The most promising drainage techniques is negative pressure abdominal drainage (NPAD). However, this requires devices that are currently not available in many veterinary hospitals. When this is not available, active closed suction drainage is preferred as it is easier to manage and has fewer complications than passive open abdominal drainage (POAD).
- Further research is needed and more attempts should be made to incorporate the techniques used in human medicine in our patients.