

PERITONITIS

(INFLAMMATION OF THE LINING OF THE ABDOMEN)

BASICS

OVERVIEW

- An inflammatory process involving the lining of the abdominal cavity; the lining of the abdomen is the “peritoneum”

SIGNALMENT/DESCRIPTION of ANIMAL

Species

- Dogs and cats

SIGNS/OBSERVED CHANGES in the ANIMAL

- Abdominal pain—localized or generalized throughout the abdomen
- A “praying” position—for relief of pain
- Vomiting is common
- Low blood pressure (known as “hypotension”) and shock—may develop rapidly
- Rapid heart rate (known as “tachycardia”) and a variety of irregular heart beats (known as “arrhythmias”) often are noted
- Fever is not a consistent finding

CAUSES

Primary Inflammation of the Peritoneum (Peritonitis)

- Uncommon
- Results from direct infection through spread of the disease-causing agent (such as bacteria) through the blood stream

Secondary Inflammation of the Peritoneum (Peritonitis)

- Predominant form of peritonitis
- Results from disruption of the abdominal cavity or a hollow abdominal organ, such as the intestine
- Other causes include breakdown of surgical sites; penetrating abdominal wounds; blunt abdominal trauma; inflammation of the pancreas (known as “pancreatitis”); infection and inflammation of the uterus, with accumulation of pus (known as “pyometra”); liver or prostatic abscesses; and rupture of the gallbladder, urinary bladder, or bile duct

RISK FACTORS

- Trauma
- Gastrointestinal surgery
- Undetected abscess of liver, pancreas, prostate, or uterine stump

TREATMENT

HEALTH CARE

- Inpatient care is needed because intensive monitoring is required
- Fluid therapy and antibiotics, administered intravenously
- Potassium and glucose—may need to be supplemented in the intravenous fluids
- The decision to treat the pet medically (drugs only) or surgically is dictated by the cause (if known) of the inflammation of the lining of the abdomen (peritonitis), the pet’s response to initial treatment, and the anticipated cost of treatment; mild cases that seem to respond to medical treatment may not need surgery

ACTIVITY

- Usually limited, as a result of hospitalization and confinement

DIET

- The approach to nutritional support is determined by the circumstances of each individual patient
- Diet is dictated by the cause of the peritonitis, when identified, and any coexistent conditions (such as heart disease)
- Feeding tube, if necessary, may be placed for nutritional support
- Adequate nutrition—essential to optimize outcome

SURGERY

- Most patients will require surgical exploration of the abdomen to clean and remove dead tissue and, if possible, identify and correct any underlying or contributing factor
- Known bacterial contamination or suspected chemical-related inflammation of the lining of the abdomen (peritonitis)—surgical intervention is necessary
- Many animals will die, even with surgical attention

- Following surgery, the abdomen may be closed or may be left open for drainage; the decision to close the abdomen or leave it open is determined by your pet's veterinarian, based on the degree of abdominal contamination, ability to remove all debris, severity of the illness, and anticipation of complications from the presence of pus-forming bacteria

MEDICATIONS

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive.

- Antibiotics—broad-spectrum; when possible, based on bacterial culture and sensitivity testing
- Pending results of bacterial culture and sensitivity testing—try a combination of an aminoglycoside (such as amikacin, gentamicin) and a cephalosporin (such as cefazolin) or a penicillin (such as ampicillin)
- Fluoroquinolones—such as enrofloxacin or orbifloxacin may be substituted for an aminoglycoside, especially if the animal has impaired kidney function
- Medications to control pain (known as “analgesics”)

FOLLOW-UP CARE

PATIENT MONITORING

- Fluid balance, electrolyte balance, acid–base status—monitor closely
- Frequency of monitoring—varies with patient's condition and response to treatment
- Blood work (including a complete blood count [CBC] and serum chemistry profile) and a urinalysis—every 1 to 2 days during periods of intensive monitoring, even in patients that are responding to treatment

PREVENTIONS AND AVOIDANCE

- Prevention—difficult, except when specific risk factors are identified (such as infection and inflammation of the uterus [pyometra])

POSSIBLE COMPLICATIONS

- Abdomen left open to allow peritoneal drainage—abdominal contents may pass through the opening (known as “herniation”)
- Scar tissue
- Death

EXPECTED COURSE AND PROGNOSIS

- Prognosis—depends on rapid identification and successful management of the underlying cause and appropriate follow-up care
- Inflammation of the lining of the abdomen with bacterial infection (known as “septic peritonitis”)—leaving the abdomen open to allow peritoneal drainage may improve survival

KEY POINTS

- If underlying cause is not identified and managed, patient is at risk for complications
- Many animals with inflammation of the lining of the abdomen (peritonitis) will die, even with surgical exploration of the abdomen
- Treatment, extensive monitoring and intensive care may be costly

