Inflammation of the Vagina (Vaginitis)

Basics

Overview

- “Vaginal” refers to the vagina; the “vagina” is the tubular passageway leading from the opening of the vulva to the cervix of the uterus; “vulvar” refers to the vulva; the “vulva” is the external genitalia of females
- “Vaginitis” is inflammation of the vagina
- “Bitch” is a female dog

Signalment/Description of Pet

Species
- Primarily dogs

Mean Age and Range
- Juvenile vaginitis or “prepubertal vaginitis”—less than 1 year of age; range, 8 weeks–1 year; occurs in prepubertal bitches (that is, bitches that have not gone through puberty)
- Adult-onset vaginitis—over 1 year of age; range, 1–16 years of age

Predominant Sex
- Females

Signs/Observed Changes in the Pet

Juvenile Vaginitis (Inflammation of the Vagina Prior to Puberty)
- Vulvar discharge; frequently seen following urination
- Vaginal irritation
- Crusting of hair coat in the vulvar area
- Scooting
- Excessive vulvar licking
- Itchiness (known as “pruritus”) of skin around the vulva
- Difficulty or inability to housetrain

Adult-Onset Vaginitis (Inflammation of the Vagina in the Adult Pet)
- Vulvar discharge
- Excessive vulvar licking
- Abnormal frequent passage of urine (known as “pollakiuria”)
- Pain during urination
- Increased urination (known as “polyuria”) and increased thirst (known as “polydipsia”)
Itchiness (pruritus)
Urinary incontinence (inability to control urination)
Infertility

CAUSES
• Immature vagina (prior to puberty)
• Foreign bodies
• Urinary tract infections
• Urinary or fecal incontinence (inability to control urination or defecation)
• Tumor or cancer of the vagina—such as transmissible venereal tumor; leiomyoma
• Bacterial infections, such as Brucella canis; E. coli; Streptococcus; Staphylococcus; Pasturella; Chlamydia; Pseudomonas; Mycoplasma
• Viral infection—canine herpesvirus
• Congenital (present at birth) abnormalities—narrowing of the entrance to the vagina (known as a “vestibulovaginal stricture”) or inverted vulva
• Vaginal trauma
• Localized accumulation of blood in the vagina (known as a “vaginal hematoma”)
• Vaginal abscess
• Generalized (systemic) disease, such as diabetes mellitus (“sugar diabetes”)
• Zinc toxicity
• Medications or products containing male hormones (known as “androgens”)

RISK FACTORS
• Alteration of normal vaginal bacteria following the use of antibiotics in treatment of infections anywhere in the body
• Medications or products containing male hormones (androgens)—may cause enlargement of the clitoris (known as “clitoral hypertrophy”)
• Inverted or recessed vulva (female external genitalia)
• Obesity
• Abnormal conformation
• Vaginal trauma

Treatment

HEALTH CARE
• Correction or removal of underlying cause
• Most often treated as outpatients
• Inpatient—surgical management of anatomic abnormalities, foreign bodies, tumors/cancer, or structural abnormalities
• Baby wipes may be used to clean the area around the vulva

ACTIVITY
• Normal

DIET
• Normal

SURGERY
• Remove or treat any inciting causes—foreign body; tumor or cancer; anatomic abnormalities
• Surgical repair of a defect or abnormality of the vulva (female external genitalia; surgical procedure known as an “episioplasty”)
• Surgical removal of the vagina (known as “vaginectomy”)—may be performed in pets that do not respond to medical treatment
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.

JUVENILE VAGINITIS (INFLAMMATION OF THE VAGINA PRIOR TO PUBERTY)
- No treatment for bitches with uncomplicated juvenile vaginitis
- Antibiotic therapy for pets with severe discomfort (pain or excessive vulvar licking) and/or urinary tract infection
- Antibiotics should be selected based on bacterial culture and sensitivity testing
- Diethylstilbestrol (DES)—a synthetic estrogen (female hormone); may be used to induce “heat” or “estrus” in puppies with vaginitis that is unresponsive to other treatment; long-term effects not documented; discuss the risks and benefits of treatment with your pet's veterinarian

ADULT-ONSET VAGINITIS (INFLAMMATION OF THE VAGINA IN THE ADULT PET)
- Systemic antibiotics (antibiotics administered by mouth or injection)—selected based on positive bacterial culture obtained deep within the vagina and sensitivity testing; treat for 4 weeks
- Nonsteroidal anti-inflammatory drugs (NSAIDs)—help to decrease inflammation
- Steroids—may be helpful in decreasing inflammation and discomfort; side effect are less desirable and may result in subsequent infection
- Diethylstilbestrol (DES)—a synthetic estrogen (female hormone); may be used in spayed bitches with inflammation of the vagina of unknown cause (so-called “idiopathic vaginitis”) or recurrence of inflammation of the vagina (known as “recurrent vaginitis”); medication helps to improve condition of lining of the vagina; your pet's veterinarian will discuss the treatment protocol

Follow-Up Care

PATIENT MONITORING
Juvenile Vaginitis (Inflammation of the Vagina Prior to Puberty)
- Reevaluate if signs become more severe or intolerable
- Reevaluate after the first “heat” or “estrus”
Adult-Onset Vaginitis (Inflammation of the Vagina in the Adult Pet)
- Recheck if signs do not resolve after correction or removal of underlying cause
- Repeat the bacterial culture 5–7 days after completion of antibiotic treatment or if signs persist despite treatment

PREVENTIONS AND AVOIDANCE
- Delay spaying (ovariohysterectomy) until after the first “heat” or “estrus” in pets with juvenile vaginitis (inflammation of the vagina prior to puberty)
- Avoid using antibiotics in ill pets in which bacterial infection is unlikely
- Maintain good body weight and condition
- Avoid vaginal douching
- Avoid medications that contain androgens (male hormones)

EXPECTED COURSE AND PROGNOSIS
- Juvenile vaginitis (inflammation of the vagina prior to puberty)—onset at 6 weeks to 6–12 months of age; duration of inflammation may be days to months, but typically have intermittent signs; normally resolves with time or after the first “heat” or “estrus”
- Adult-onset vaginitis (inflammation of the vagina in the adult pet)—usually resolves after correction or removal of the underlying cause; antibiotic therapy may hasten resolution in those pets with bacterial infections; nonsteroidal anti-inflammatory drugs (NSAIDs) may help resolve inflammation
Key Points

- Pets infected with *Brucella canis* should be isolated; euthanasia should be considered due to the lack of effective treatment and the zoonotic potential; “zoonoses” are diseases that can be passed from animals to people
- Any products or medications containing estrogens (female hormones) or androgens (male hormones) must be removed from the environment

**JUVENILE VAGINITIS (INFLAMMATION OF THE VAGINA PRIOR TO PUBERTY)**
- Generally resolves without treatment; be patient
- Should resolve after the first “heat” or “estrus,” if not before; pet may need to go through one heat or estrus prior to having surgery to remove the ovaries and uterus (ovariohysterectomy); discuss timing of surgery with your pet’s veterinarian

**ADULT-ONSET VAGINITIS (INFLAMMATION OF THE VAGINA IN THE ADULT PET)**
- Usually occurs secondary to an underlying cause
- Generally resolves after correction of the underlying cause
- If no primary cause can be identified, high likelihood of spontaneous recovery without treatment