

VAGINAL DISCHARGE IN DOGS

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
- “Vaginal discharge” is any substance (such as blood, mucus, pus) coming from the vagina, through the vulvar opening
- “Bitch” is a female dog

SIGNALMENT/DESCRIPTION of ANIMAL

Species

- Dogs

Mean Age and Range

- Bitches prior to going through puberty (known as “prepubertal bitches”)—anatomic abnormalities and prepubertal inflammation of the vagina (known as “prepubertal vaginitis”) more common
- Bitches in “heat” or “estrus” or following delivery of puppies (whelping)—normal vaginal discharges are common
- Bitches that recently have completed their “heat” or “estrous cycle” or are pregnant or following delivery of puppies (whelping)—vaginal discharge may be more serious

Predominant Sex

- Females

SIGNS/OBSERVED CHANGES in the ANIMAL

- Discharge from the vulva (the external genitalia); discharge may be blood; blood, mucus, and tissue debris (known as “lochia”) following delivery of puppies; pus; urine; or feces
- Spotting
- Scooting
- Attracting males
- Delivering puppies (whelping or parturition)—with postpartum discharge
- History of “heat” or “estrus” during the preceding 2 months—vaginal discharge may be related to inflammation with accumulation of pus in the uterus (known as “pyometra”)

CAUSES

Discharge Containing Serum and Blood (known as “serosanguineous discharge”)

- Normal during early heat cycle (known as “proestrus”) and sometimes into “heat” or “estrus”
- Urinary tract infection
- Foreign body
- Tumor or cancer of the vagina—such as transmissible venereal tumor; leiomyoma
- Vaginal trauma
- Fetal death
- Localized accumulation of blood in the vagina (known as a “vaginal hematoma”)
- Tumor or cancer of the ovaries
- Blood-clotting disorders (known as “coagulopathies”)

Discharge Containing Blood, Mucus, and Tissue Debris (Lochia) and Other Discharges Following Birth (Postpartum)

- Normal postpartum discharge—for 6 to 8 weeks
- Subinvolution of placental sites (condition in which the placental attachment sites in the lining of the uterus do not return to normal in 6 to 8 weeks)—discharge lasting longer than 8 weeks
- Retained placentas or afterbirth (condition in which one or more placentas remains within the uterus following the delivery of the puppy or puppies)
- Inflammation of the lining of the uterus (known as “metritis”)

Discharge Containing Pus

- Normal in early diestrus (“diestrus” is the phase of the “heat” cycle immediately after “standing heat;” slight amount of discharge)
- Inflammation of the vagina in a bitch prior to puberty (prepubertal vaginitis)
- Primary inflammation of the vagina (vaginitis)
- Secondary inflammation of the vagina (vaginitis)—from anatomic abnormality, foreign body, urinary tract infection, enlargement of the clitoris (known as “clitoral hypertrophy”), vaginal tumor, and fetal death
- Inflammation with accumulation of pus in the uterus (pyometra)
- Embryonic and fetal death

- Inflammation of the lining of the uterus following birth of the puppies (postpartum metritis)
- Inflammation of the skin around the vulva (known as “perivulvar dermatitis”)
- Zinc toxicity—reported

Other

- Urine or feces—with congenital (present at birth) anatomic abnormalities
- Acquired (condition that develops sometime later in life/after birth) inflammation of the skin around the vulva (perivulvar dermatitis) also can be mistaken for vaginal discharge
- Urine from ectopic ureters or lack of control of urination (incontinence) from low levels of estrogen (known as “hypoestrogenism”); the ureters are tubes from the kidneys to the bladder; during development, they may not attach to the bladder properly or may attach to reproductive organs instead; when this occurs, they are called “ectopic ureters” and one or both can terminate in the lower urethra, uterus, or vagina
- Normal mucous discharge during pregnancy

RISK FACTORS

- Medications or products containing male hormones (androgens)—may cause enlargement of the clitoris (clitoral hypertrophy)
- Prophylactic antibiotics—may alter the normal vaginal bacteria and allow overgrowth of disease-causing species
- Estrogen medications given during certain phases of the “heat” or “estrous” cycle—predispose patient to inflammation with accumulation of pus in the uterus (pyometra)

TREATMENT

HEALTH CARE

- Outpatient, unless inflammation of the lining of the uterus (metritis) or inflammation with accumulation of pus in the uterus (pyometra) is noted and spaying (ovariohysterectomy) may be indicated
- Supportive fluids—for inflammation of the lining of the uterus (metritis) or inflammation with accumulation of pus in the uterus (pyometra), if the patient is ill
- Medical treatment for inflammation with accumulation of pus in the uterus (pyometra)—performed in a hospital and with great care
- Remove or treat any inciting cause—foreign body; tumor; anatomic abnormality; urinary tract infection; medications or products containing male hormones (androgens) or estrogens
- Inflammation of the vagina in a bitch prior to puberty (prepubertal vaginitis)—usually resolves spontaneously after the first “heat” or “estrus”
- Subinvolution of placental sites (condition in which the placental attachment sites in the lining of the uterus do not return to normal in 6 to 8 weeks)—rarely requires treatment

SURGERY

- Depends on cause of vaginal discharge
- Bitches with inflammation of the lining of the uterus (metritis) or inflammation with accumulation of pus in the uterus (pyometra) may require surgery; a “spay” or “ovariohysterectomy” (in which the ovaries and uterus are removed surgically) may be indicated
- Bitches with cancer or congenital (present at birth) anatomic abnormalities may need surgery

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.

- Inflammation of the lining of the uterus (metritis)—systemic antibiotics, if the patient is ill
- Inflammation of the vagina in a bitch prior to puberty (prepubertal vaginitis)—diethylstilbestrol to induce “heat” or “estrus” may help; long-term effects not documented; discuss the risks and benefits of treatment with your pet’s veterinarian
- Primary inflammation of the vagina (vaginitis)—systemic antibiotics; vaginal douches, as directed by your pet’s veterinarian
- Inflammation with accumulation of pus in the uterus (pyometra)—prostaglandin (substance that stimulates the uterus) and systemic antibiotics, if the patient is not extremely ill
- Transmissible venereal tumor—vincristine, a chemotherapy drug

FOLLOW-UP CARE

PATIENT MONITORING

- Ultrasonography or X-rays—determine size and contents of the uterus in cases with inflammation of the lining of the uterus (metritis) or inflammation with accumulation of pus in the uterus (pyometra)

PREVENTIONS AND AVOIDANCE

- Depends on cause of vaginal discharge
- Spaying (ovariohysterectomy) will prevent inflammation of the lining of the uterus (metritis) or inflammation with accumulation of pus in the uterus (pyometra)

POSSIBLE COMPLICATIONS

- Toxic shock—with severe inflammation of the lining of the uterus (metritis) or inflammation with accumulation of pus in the uterus (pyometra)

EXPECTED COURSE AND PROGNOSIS

- Depends on cause of vaginal discharge

KEY POINTS

- Vaginal discharge is any substance (such as blood, mucus, pus) coming from the vagina, through the vulvar opening

