

# FALSE PREGNANCY

## BASICS

### OVERVIEW

- Display of maternal behavior and physical signs of pregnancy 2 to 3 months after “heat” or “estrus” by a nonpregnant bitch
- A female dog is a “bitch”
- Also known as “pseudopregnancy,” “phantom pregnancy,” or “pseudocyesis”

### SIGNALMENT/DESCRIPTION of ANIMAL

#### Species

- Common in dogs
- Rare in cats

#### Breed Predilection

- None

#### Mean Age and Range

- Any age

#### Predominant Sex

- Nonpregnant females that were in heat or estrus 2 to 3 months earlier and that are experiencing a decline in serum progesterone concentration; “progesterone” is the female hormone that supports and maintains pregnancy in a pregnant animal—it normally remains high in nonpregnant bitches for several weeks following their heat or estrous cycles

### SIGNS/OBSERVED CHANGES in the ANIMAL

- Severity variable among individuals and from one occurrence to the next within the same individual
- Behavior changes—nesting, mothering activity (such as mothering a stuffed toy), restlessness, and self-nursing
- Abdominal distention and breast or mammary gland enlargement
- Vomiting, depression, and lack of appetite (known as “anorexia”)
- Signs of labor (rare)
- Large mammary glands that secrete a brownish fluid or milk

### CAUSES

- False pregnancy is a normal phenomenon in bitches following ovulation
- Progesterone and prolactin—drop in progesterone concentration causes prolactin concentration to rise; “progesterone” is the female hormone that supports and maintains pregnancy in a pregnant animal—it normally remains high in nonpregnant bitches for several weeks following heat or estrus; “prolactin” is a hormone that stimulates breast or mammary gland enlargement and milk production (known as “lactation”)
- Treatment with progestin (substance capable of producing the effects of the female hormone, progesterone) for conditions not related to false pregnancy—may develop signs of false pregnancy after drug withdrawal
- Surgical removal of the ovaries (known as “oophorectomy” or “ovariectomy”) or the ovaries and uterus (known as “ovariohysterectomy” or “spay”) during the period when progesterone levels are high following heat or estrus—may develop signs of false pregnancy 3 to 4 days following surgery due to the sudden drop in progesterone
- Inadequate levels of thyroid hormone (known as “hypothyroidism”) with high thyroid-stimulating hormone (TSH) concentration in the blood, which stimulates prolactin secretion—may note some associated clinical signs

### RISK FACTORS

- Not thought to be influenced by previous pregnancy
- Does not cause susceptibility to other reproductive diseases

## TREATMENT

### HEALTH CARE

- Outpatient for medical treatment
- Inpatient—planned surgery
- Treatment usually unnecessary—all pregnant, nonpregnant, and false-pregnant ovulating dogs go through a similar stage of high progesterone levels following heat or estrus
- Progestins (substances capable of producing the effects of the female hormone, progesterone) and androgens (male hormones) to decrease secretion of prolactin; “prolactin” is a hormone that stimulates breast or mammary gland enlargement and milk production (lactation)
- Surgical removal of the ovaries and uterus (ovariohysterectomy or spay) during anestrus (the time between heat or estrous cycles)—prevents recurrence

- Mammary glands—minimize stimuli that promote milk production (lactation); use cold and warm packs applied to the breasts or mammary glands
- Elizabethan collar—prevent self-nursing or licking; but even rubbing of the collar on the mammary glands may be sufficient to prolong milk production (lactation)

#### **DIET**

- Reduction of food over 3 to 4 days may reduce milk production (lactation)

#### **SURGERY**

- Surgical removal of the ovaries and uterus (ovariohysterectomy or spay)—if fertility not an issue; recommended during the next anestrus (the time between heat or estrous cycles); do not perform while pet has clinical signs of false pregnancy, because surgery will not alleviate signs and follow-up medical treatment may be required

### **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.

- Bromocriptine (Parlodel®)—not approved for veterinary use in the United States and Canada; will reduce milk production (lactation) by 89% and decrease behavioral signs of false pregnancy by 90%
- Cabergoline (Dostinex®)—a prolactin inhibitor; overall success rate 95%; “prolactin” is a hormone that stimulates breast or mammary gland enlargement and milk production (lactation)
- Testosterone—may cause development of male-like characteristics in females; should not be used in animals with liver or kidney conditions or during pregnancy (causes masculinization of female fetuses)
- Mibolerone (Cheque® Drops)—same potential side effects as testosterone
- Megestrol acetate (Ovaban®)—may cause enlargement of the breasts or mammary glands; inflammation with accumulation of pus in the uterus (known as “pyometra”); diabetes mellitus (sugar diabetes); increased appetite; weight gain; and changes in the adrenal glands; signs of false pregnancy may return after discontinuation of treatment; therefore, generally not recommended
- Mild tranquilizers may reduce behavioral signs

### **FOLLOW-UP CARE**

#### **PREVENTIONS AND AVOIDANCE**

- Surgical removal of the ovaries and uterus (ovariohysterectomy or spay) during anestrus (the time between heat or estrous cycles)—prevents recurrence

#### **EXPECTED COURSE AND PROGNOSIS**

- Usually resolves in 2 to 3 weeks without treatment
- Treatment with bromocriptine or cabergoline—may resolve condition in 1 week
- False pregnancy may develop during subsequent heat or estrous cycles

### **KEY POINTS**

- False pregnancy is a normal phenomenon in bitches following ovulation
- No association has been identified between false pregnancy and reproductive abnormalities
- If a litter is desired, breed the bitch during the next heat or estrus