

# False Pregnancy

## Basics

### OVERVIEW

- Display of maternal behavior and physical signs of pregnancy 2–3 months after “heat” or “estrus” by a non-pregnant bitch
- Physical, hormonal, and behavioral changes following an unsuccessful mating or spontaneous ovulation in the queen; “ovulation” is the release of the egg from the ovary
- A female dog is a “bitch”; a female cat is a “queen”
- False pregnancy also known as “pseudopregnancy,” “phantom pregnancy,” or “pseudocyesis”

### SIGNALMENT/DESCRIPTION OF PET

#### Species

- Dogs—common
- Cats

#### Breed Predilections

- None

#### Mean Age and Range

- Any age

#### Predominant Sex

- Female
- Non-pregnant bitches that were in heat or estrus 2–3 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 pet—it normally remains high in non-pregnant bitches for several weeks following their heat or estrous cycles
- Non-pregnant queens that were in heat or estrus approximately 40 days earlier

### SIGNS/OBSERVED CHANGES IN THE PET

- 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 or unrelated puppies or kittens), restlessness, and self-nursing
- Aggression
- Sluggishness (lethargy)
- Abdominal distention (rare) and breast or mammary gland enlargement
- Weight gain
- Vomiting, depression, and lack of appetite (known as “anorexia”)
- Large mammary glands that secrete a clear to milky to brownish fluid

### CAUSES

- False pregnancy is a normal phenomenon in bitches following ovulation (release of the egg from the ovary)
- 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 pet—it normally remains high in non-pregnant 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 3–4 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

- Ovariectomy or ovariohysterectomy or spay performed during the period when progesterone levels are high following heat or estrus
- Treatment with progestins
- Not thought to be influenced by previous pregnancy
- Does not cause susceptibility to other reproductive diseases

## Treatment

### HEALTH CARE

- Usually no treatment needed—all pregnant, non-pregnant, and false-pregnant ovulating dogs go through a similar stage of high progesterone levels following heat or estrus
- Outpatient for medical treatment
- Inpatient—planned surgery
- 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 packs applied to the breasts or mammary glands, followed by warm compresses
- 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 for several days may reduce milk production (lactation)

### SURGERY

- Surgical removal of the ovaries and uterus (ovariohysterectomy or spay)—if the bitch or queen is not intended for breeding; recommended during the next anestrus (the time between heat or estrous cycles), when possible

## 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

- Cabergoline (Dostinex)—a prolactin inhibitor; “prolactin” is a hormone that stimulates breast or mammary gland enlargement and milk production (lactation)
- 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%
- Diazepam—medication used to decrease anxiety; short-term treatment for bitches with extreme behavioral signs
- Mibolerone—to reduce signs of false pregnancy in bitches; should not be used in queens
- Dexamethasone—old remedy will reduce breast swelling and often disrupt hormonal influence

# Follow-Up Care

## PATIENT MONITORING

- Surgical removal of the ovaries (ovariectomy) or ovaries and uterus (ovariohysterectomy or spay) during anestrus (the time between heat or estrous cycles)—prevents recurrence
- “Heat” or estrus suppression

## EXPECTED COURSE AND PROGNOSIS

- Usually resolves in 2–4 weeks without treatment
- Treatment with bromocriptine, cabergoline, or mibolerone—may resolve condition in 5–7 days
- False pregnancy may develop during subsequent heat or estrous cycles
- False pregnancy does not impact future fertility

## Key Points

- False pregnancy is a normal phenomenon in bitches following ovulation (release of the egg from the ovary)
- False pregnancies do not impact future fertility
- Bitches or queens should be evaluated for actual pregnancy before treating for false pregnancy
- No association has been identified between false pregnancy and reproductive abnormalities
- Pyometra (inflammation with accumulation of pus in the uterus) can develop in queens following spontaneous ovulation (release of the egg from the ovary)