

PREVALENCE OF CLINICAL SIGNS AND SYMPTOMS IN PSEUDO PREGNANT BITCHES

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Exfoliative vaginal cytology indices were calculated in two groups of oestrus induced animals and one group of The present study was conducted on 24 bitches irrespective of breed, age, size and parity suspected for the pseudo pregnancy from adjoining Nagpur along with the cases attended at Veterinary Clinical Complex, Nagpur during April to Nov 2021. The aim of present research work was to study the influence of clinical signs and symptoms in twenty four pseudo pregnant bitches. Out of 24 bitches exhibiting symptoms of pseudo pregnancy under the category of psychological or behavioral changes, 20 dogs with of 83.33 per cent of dogs were having the symptoms while maternal behavioral changes as nesting was shown by 18 dogs. Late gestational physical changes such as mammary gland enlargement was observed in 13 dogs out of 24 during the present research work.

Keywords: Bitches, Maternal behavior, Pseudopregnancy.

Pseudopregnancy is a physiological phenomenon in the mammalian species especially in canines where all the signs and symptoms of pregnancy like nursing, ejection of milk from teat are observed in spite of the absence of foetus (Garai *et al.*, 2020). Pseudocyesis or pseudopregnancy as a syndrome affects female dogs in non-gestational diestrus and is marked by physiological changes similar to those seen at the end of pregnancy or postpartum (Silva *et al.*, 2021). Estimated incidence rate of pseudopregnancy may vary from 50 % to 75 % in most of the breeds of dog (Singh *et al.*, 2018) though reported cases are scanty due to lack of diagnostic facilities in the field condition. Although the term pseudopregnancy is used most frequently, it is confusing as it is used to describe distinct physiological situations among different species. In felids, for example, pseudopregnancy is a non-pregnant luteal phase. In laboratory rodents, it is also a non-pregnant luteal phase which occurs after infertile mating. The syndrome usually begins with behavioral signs such as restlessness, decreased activity, nesting behavior, aggression, licking of the abdomen

and mothering inanimate objects and later pseudo pregnant bitches show physical signs such as weight gain, mammary enlargement, even milk secretion and let-down likewise sometimes abdominal contractions that mimics those of parturition. Mammary hypertrophy was usually more evident in the most caudal pair of glands (Singh *et al.*, 2019). The aim of this research was to study the influence of clinical signs and symptoms in twenty four pseudo pregnant bitches as a clinical problem.

Materials and Methods

The present study was conducted on 24 bitches presented at the Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur along with the symptoms of pseudo-pregnancy during the period of 7 months from April to Nov 2021. The 24 bitches were selected with the clinical signs of pseudo pregnancy and around 30-90 days from their last estrus period for the present study. Diagnosis was done on the presence of clinical signs exhibited by the female dogs. The major differential diagnosis, pregnancy was ruled out by abdominal palpation, ultrasound or radiography.

Clinical signs and symptoms exhibited by the pseudo pregnant bitches during the present study were recorded and classified into four categories

1. Psychological or behavioral changes
2. Maternal behavioral changes
3. Late gestational physical changes
4. Less common signs

Results and Discussion

Clinical signs of Pseudo pregnancy in bitches

Clinical signs and symptoms exhibited by the pseudo pregnant bitches during the present study were recorded and classified into four categories (Table no.1)

Psychological or behavioral changes

Table 1 showed that out of 24 bitches exhibiting symptoms of pseudo pregnancy under the category of psychological or behavioral changes, 20 dogs had shown the symptoms of licking abdomen with of 83.33 per cent of dogs were have the symptoms. Higher percent of behavioral changes observed were loss of appetite and changes in activity in 8 (33.33%) bitches each followed by restlessness in 5 (20.83%) bitches and aggressiveness was recorded in just 12.5 per cent (3) bitches.

Maternal behavioral changes

Table 1 depicts the values of maternal behavioral changes observed in 24 bitches. Out of these 24 bitches 18 dogs (75%) showed nesting behavior as the higher percentage of symptoms, followed in 5 dogs (20.83%) with the symptoms of mothering behavior such as licking or collecting toys, clothes, footwear or other inanimate objects. In the present study no adopting of other or orphaned puppies by pseudo pregnant dogs was noticed as per the history collected from the owner.

Late gestational physical changes

The most frequent observed sign, mammary gland enlargement was found in 13 dogs (54.16%) followed by weight gain in 5 dogs (20.38%). While all 24 dogs presented at Veterinary Clinical Complex were had the symptoms of milk secretion (100 per cent). No abdominal contractions were seen in the present study (Table 1).

Less common signs

The less common signs noticed in the current study were vomition in 8.33% (2) dogs, diarrhea (4.16%) in a single dog and polydipsia (4.16%) also in a single dog while polyphagia and polyuria were not observed in any of the pseudo pregnant dogs (Table 1).

Table 1: PREVALENCE OF PSEUDO PREGNANCY SYMPTOMS IN BITCHES

Sr no.	Pseudo pregnancy symptoms.	No. of bitches	Per cent(%) symptoms
Psychological or behavioral signs			
1.	Restlessness	05	20.83%
2.	Anorexia	08	33.33%
3.	Decreased activity	08	33.33%
4.	Aggression	03	12.5%
5.	Licking of abdomen	20	83.33%
Maternal behavioral signs			
1.	Nesting	18	75%
2.	Mothering inanimate objects	05	20.83%
3.	Adopting puppies	Nil	Nil
Late gestational physical signs			
1.	Weight gain	05	20.83 %

2.	Mammary enlargement	13	54.16 %
3.	Milk secretion	24	100 %
4.	Abdominal contractions	Nil	Nil
Less common signs			
1.	Emesis	02	8.33%
2.	Diarrhea	01	4.16%
3.	Polyuria	Nil	Nil
4.	Polydipsia	01	4.16%
5.	Polyphagia	Nil	Nil

Similarly Garai *et al.*, 2020, reported a case of crossbred bitch aged about 8 years with the symptoms of abdominal distension, enlargement of mammary glands as well as secretion of clear milk from teat on pressure, licking of mammary glands, loss of appetite and restlessness. The results of present findings are also in accordance with Root *et al.*, 2018, who reported that the most frequent physical signs were mammary gland enlargement and milk production as 90 per cent. The two most common behavioral signs reported were collecting and mothering objects (65%) and nesting behavior was in 65 per cent dogs.

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