

COMPARATIVE EFFICACY OF DIFFERENT TREATMENT PROTOCOLS FOR PSEUDO-PREGNANCY IN BITCHES

Megha Kose¹, S.K.Sheetal, M.S.Bawaskar², S.K.Sahatpure³, and S.Yesambhare

¹Ph.D. Scholar, ²Assistant Professor, ³Associate Professor & Incharge, ARGO Deptt., Teaching Veterinary Clinical Complex, Nagpur Veterinary College, Maharashtra Animal and Fishery Sciences University, Nagpur, Maharashtra.

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Twelve cases of pseudopregnancy were treated with Cabergoline and *Thuja Occidentalis* to compare their efficacy. Cabergoline is the suggested drug of choice for the treatment of pseudopregnancy because it has the least side effects and longer duration of action. *Thuja Occidentalis* affects the central nervous system and is effective in abdominal and mammary oedema regression due to affecting renal function.

Keywords: Cabergoline, Canine, Pseudo-pregnancy, *Thuja Occidentalis*.

Pseudo-pregnancy is a physiological, atavistic syndrome that appears 6-12 weeks after oestrus in non-pregnant bitches (Allen, 1986). It is characterized by the presence of pregnancy in non-pregnant animal is defined as pseudo-pregnancy or false pregnancy or pseudocyesis. The terms false pregnancy and pseudo-pregnancy are often used interchangeably but they may not always refer to the same hormonal situations. Pseudo-pregnancy usually begins with behavioural signs such as restlessness or decreased activity, anorexia, aggression, licking of the abdomen and maternal behaviours (nesting, mothering inanimate objects, adopting puppies from other bitches). Later on, bitches show physical signs such as body mass gain, mammary gland enlargement and milk secretion (Lawler DF *et al.*, 1999, Gobello *et al.*, 2001). Ergot alkaloids and their derivatives (Bromocryptine, Lergotriple, Lisuride and Cabergoline) have been

established as prolactin inhibitors, which directly stimulate dopamine receptors. These receptors are located in luteotrophic cells in the anterior pituitary gland in humans and animals (Arbeiter *et al.*, 1988). Homeopathic drugs have also been used in pseudo pregnant bitches (Aslan *et al.*, 2004). The objective of the present study was comparison of the antiprolactin and homeopathic drugs for the treatment of pseudopregnancy.

Materials and Methods

The present study was conducted on 12 female Labrador retriever dogs with age group 2-6 years were selected on the basis of owner's complaint, history and clinical examination at Teaching Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur. The bitches were thoroughly examined and diagnosed accordingly. All the treated female dogs were grouped as under.

Experimental design:

Selected animals were treated with either group on the basis of clinical signs

Sr.No	Group	Treatment	Dose rate
1	Group I (n-6)	Cabergoline (Cabgoline)	5 µg/kg dissolved in 100 ml water @ 4-5 drops/day for 7 days
2	Group-II (n-6)	<i>Thuja Occidentalis</i>	30c (8 globules 3-4 times/day until the symptoms remission)

Results and Discussion

During the present study, 4 bitches were found with three clinical signs, like nesting, mothering inanimate objects and oozing of milk from teats and those bitches

were treated with Cabergoline. After the treatment all the symptoms shown by the bitches (nesting behaviour, mothering inanimate objects and oozing of milk) were resolved from Group I bitches.

TABLE: 1 DIFFERENT TREATMENT PROTOCOL AND THEIR RESPONSE

Sr. No	Groups (N=6)	Treatment given	Clinical signs	Treatment response
1	Group-I	Cabergoline (Cabgoline) 0.5mg/kg dissolved in 100ml water 4-5 drops per day for 7 days	Nesting, oozing of milk, maternal behaviour	83% (5/6)
2	Group-II	<i>Thuja Occidentalis</i> 30c 8 globules 3-4 times per day	Mammary enlargement and milking from teats	75% (4/6)

The present findings are closely related with Bastan *et al.* (1998) who used Cabergoline in overtly pseudopregnant bitches and found that, the enlarged mammary glands were completely resolved by 7th day. Sixty eight percent dogs required repeated course of Cabergoline to resolve physical signs completely, which compares results of Harvey *et al.* (1997) who found the overall success rate of pseudo-pregnant bitches was 73 percent by using Cabergoline for 5 days.

In the present study one bitch from group- I was presented for pregnancy diagnosis with enlargement of teats and milking. On ultrasonography examination the bitch was not found pregnant and treated with the same Cabergoline and found complete resolved of symptoms in 5 days. Cabergoline is the suggested drug of choice for the pseudopregnancy because it has the least side effects and longer duration of action. In group II, three bitches showed only symptoms of oozing of milk from teats with transparent and brown colour discharge was treated with *Thujaoccidentalis* 30c @ 8 globules 3-4 times/day till the remission of symptoms.

The present study was closely related with the Nihatzyurtlu, 2005, who concludes that, homeopathic *Thuja* D30 may be used effectively and safely as an alternative to common pharmacological agents in pseudopregnant bitches. Complete recovery in both physical and behavioral signs was observed in all bitches treated with *Thuja* and mean time duration of treatment was 13 days.

Aslan *et al.* 2004 also reported that, *Thuja Occidentalis* D30 and *Urtica Urens* D6 were effective in pseudopregnant bitches without any side effects. *Thuja Occidentalis* affects the central nervous system and is effective in abdominal and mammary edema
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regression due to renal function affections. Homeopathic *Thuja* D30 was given in 8 globules three times daily to all pseudopregnant bitches and this procedure did not affect the results of the study .

Recovery of mammary gland in both the groups was 100 percent which supports the observations by Beceriklisoy, *et al* 2008.*Thuja Occidentalis* has great affinity to malfunction and hyperplasia of tissues as well as organs. It supports the absorption of abdominal and mammary oedema by affecting renal function. *Thuja Occidentalis* also acts on pseudopregnant bitches due to its action on the central nervous system, mammary glands and balancing of hormones.

In the present study, Group I take less time than group II which is closely related to the findings by Gobello *et al* 2003, who noted that duration of successful antiprolactinic treatment for canine pseudopregnancy is shorter (5-7 days) than the time needed for homeopathic treatment. During the present study, administration of *Thuja Occidentalis* provoked no discomfort and no side effects were found in the bitches.

Conclusions

It is concluded that, Cabergoline is a specific treatment for the pseudo-pregnancy bitches and it doesn't need any supportive treatment. Homeopathic drug like *Thuja Occidentalis* can be effectively used without any side effects in pseudo-pregnant bitches but it takes longer duration of time interval for recovery.

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