

COMPARATIVE EFFICACY OF NON -HORMONAL DRUGS IN THE TREATMENT OF PSEUDOPREGNANCY IN BITCHES

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The present study was conducted on 24 bitches irrespective of breed, age, size and parity along with the behavioural signs and symptoms suspected for the pseudopregnancy from adjoining Nagpur along with the cases attended at Veterinary Clinical Complex, Nagpur during April to Nov 2021. These 24 bitches were divided equally in to 4 Groups each comprising of 6 bitches. Each group were given 3 different treatment regimens includes allopathic, homeopathic and herbal treatment, while one group of animals was kept as control. Cabergoline tablet at 5µg/Kg BW once daily took an average of 14.5±0.4 days for complete recovery and Fertigo liquid @ 1ml thrice a day daily took an average of 10.5±0.4 days. Aloes compound tablet @2 tabs per day took an average of 17.8 ±1.3 days to recover. Out of 24 bitches 20 bitches recovered with mean duration of 14.08 ±0.70 days. However, p value found is >0.05 which shows that it is non-significant.

Keywords: Pseudopregnancy, Bitches, Homeopathic, Cabergoline.

The condition characterized by the presence of signs of pregnancy in a non pregnant bitch is defined pseudopregnancy or false pregnancy or pseudocyesis. This condition is also referred as false lactation or nervous lactation as it is often accompanied by milk production and not always from all mammary glands. 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. It is a physiological phenomenon in the mammalian species especially in canine and feline, where all the signs and symptoms of pregnancy like nursing, ejection of milk from teat is observed inspite of the absence of foetus (Garai *et al.* 2020). There are lot of therapeutic regimens routinely used for the treatment of pseudopregnancy the pharmacological approach for the treatment of this pseudopregnancy includes homeopathy – Ozyurtlu, 2005 has submitted 100 percent success rate in bitches by using Thuja D30 with mean duration of successful treatment as 13.67 days; Beceriklisoy *et al.* 2008, studied 30 clinically pseudopregnant bitches which were assigned with Thuja occidentalis D30 @ 8 globules, 3 times a day

and Urtica urens D6 @ 8 globules, 3 times a day in 15 bitches respectively administered and submitted recovery in all 30 bitches with 100 percent success rate. Steroids which will cause bone marrow suppression and other side effects. Repeated harsh or inadequate therapies targeted at eliminating symptoms tend to degenerate into mammary tumors. Considering all about the pseudopregnancy and looking towards the background, the some economical, self - treatment, easy to administer and having minimum or no side effect, therapeutic remedy is required to combat this problem of pseudopregnancy. This study focuses comparative efficacy of allopathic, homeopathic and ayurvedic drugs in pseudopregnant bitches.

Materials and Methods

Present research was carried out at Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur for a period of 7 months from April 2021 to Nov 2021. Total 24 pseudopregnant bitches were divided into four groups equally comprising of 6 bitches in each. The bitches in this Group I (n=06) were treated with Cabergoline tablet (caberlin® 0.5mg) at the dose rate of 5µg /kg

BW. Cabergoline tablet of 0.5 mg was dissolved in 100 ml distilled water and 3 drops of that solution was advised to administered orally thrice a day for 10 days along with the Vit A capsule (cod liver oil) @ 1 capsule/day for 10 days. Group II (n=6) bitches were treated with Fertigo homeopathic liquid @ 1 ml thrice a day for 10 days. Group III (n=6) bitches were treated with (Ayurvedic drug) Aloes compound tablet @ 2 tabs / day for 15 days. Local application of Vinegar on mammary glands was advised to all the 6 bitches which were kept as a control Group IV. Diagnosis was done on the presence of clinical signs exhibited by the female dogs. The major differential diagnosis is pregnancy, which was ruled out by abdominal

palpation, ultrasound or radiography. The data was analyzed by applying completely randomized design as per WASP-2.0.

Results and Discussion

Efficacy of non-hormonal drugs in the treatment of pseudopregnancy

Table 1 reveals that out of 6 bitches from Group I, 5 bitches recovered with success rate of 83.33 per cent, with the recovery range of 13 to 16 days with the mean duration of 14.5 ± 0.4 days. While in Group II i.e. homoeopathically treated bitches showed 100 % success rate with the range of recovery of all signs and symptoms was 9 to 12 days along with the mean duration of 10.5 ± 0.4 days (Fig.1).

Table 1: Efficacy of different therapeutic regimens for pseudopregnant bitches (n=24).

Sr. No.	Treatment Group	No.of bitches	No.of bitches recovered	Percent of bitches recovered (%)	Duration of recovery range (in days)	Mean Duration of Recovery (mean \pm SE).	Significance	P value
1.	Group I (Allopathic)	06	05	83.33%	13-16 days	14.5 ± 0.4	N.S	0.49
2.	Group II (Homeopathy)	06	06	100%	9-12 days	10.5 ± 0.4	N.S	
3.	Group III (Ayurveda)	06	05	83.33%	14-22 days	17.8 ± 1.3	N.S	
4.	Group IV (Control Group)	06	04	66.66%	12-15 days	13.5 ± 0.5	N.S	
	Total (n=24) Overall	24	20	83.33%	9-22 days	14.08 ± 0.70		

N.S -Nonsignificant P Value > 0.05

Table 1 also represents that treatment group III was observed with 83.33 % recovery rate in five bitches out of 6 by using Ayurved treatment with recovery range of 14 to 22 day and mean duration of 17.8 ± 1.3 days. While Group IV i.e. control Group out of 6 bitches, four recovered successfully with 66.66 per cent. The range of recovery of all the signs and symptoms was 12-15 days along with the mean duration of 13.5 ± 0.5 days (Fig.1).

Cabergoline is effective in suppressing prolactin release from the pituitary and it lowers blood concentration. But this suppression is only temporary in a proportion of cases. The fact is that, clinical cure can be obtained despite the rebound suggested that the drug may be having its effect not only by suppressing blood concentrations, but probably also by directly affecting the tissues involved in the condition, such as mammary tissue

and behavioural centres. The theory behind this is that a direct tissue response occurs may be confirmed by work using Cabergoline to reduce the anoestrous period

in the bitch as also reported by Harvey *et al.*1997.. So this can be a reason that cabergoline has not shown the required results in present study.

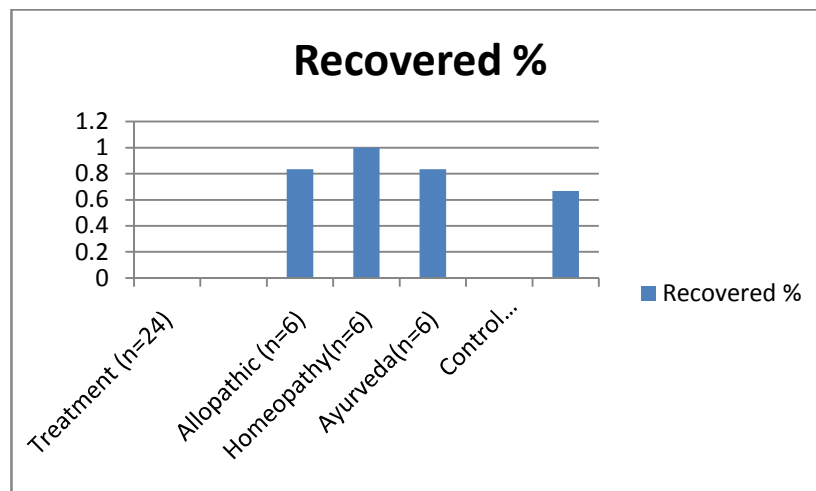


Fig.1: Efficacy of different therapeutic regimens for pseudopregnant bitches (n=24).

Use of Homeopathic drug was found to be more effective than Allopathic and Ayurvedic in the number of days needed for complete recovery of the clinical signs. In Group II (Homeopathic) mean duration of recovery was 10.5 ± 0.4 days compared to other Groups. The side effects were also not observed by Fertigo liquid as compare to Cabergoline in which milder side effects were seen. Managemental therapy i.e. applying vinegar was also slightly effective in treating pseudopregnancy with a mean duration of 13.5 ± 0.5 days for complete remission of clinical signs. From the present study, it can be concluded that, therapeutic management of pseudo pregnancy by using Homeopathic drug was found to be more effective than Allopathic and Ayurvedic treatment with minimal side effects.

References

Beceriklisoy, H.B., Özyurtlu, N., Kaya, D., Handler, J., and Aslan, S. (2008). Effectiveness of *Thuja occidentalis*

and *Urtica urens* in pseudopregnant bitches. *Vet. Med.Austria/Wien Tierärzti, Mschr*, **95**: 263-268.

Garai, D., Mukherjee, I., Roy, I. and Mukhopadhyay, A. (2020). Pseudopregnancy In A Bitch- A Case Report. *Indian J. Anim. Hlth.*, **59**(1): 103-104.

Harvey, M.J.A., Cauvin, A., Dale, M., Lindley, S. and Ballabio, R. (1997). Effect & mechanisms of the anti-prolactin drug cabergoline on pseudopregnancy in the bitch. *Journal of small animal practice*, **38**(8): 336-339.

Ozyurtlu, N., and Alacam E. (2005). Effectiveness of Homeopathy for the Treatment of Pseudo pregnancy in Bitches. *Turkish Journal of Veterinary and Animal Sciences*, **29**(3): 903-907.

Singh, L.K., Bhimte, A., Pipelu, W., Mishra, G.K. and Patra, M.K. (2018). Canine pseudopregnancy and its treatment strategies. *Journal of Entomology and Zoology Studies*, **6**(3): 1076-1078.