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## Management of Pseudopregnancy in goat in field condition –A case report

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### Abstract

Pseudopregnancy is one among the causes of infertility in goats also called as hydrometra or mucometra. A three year old healthy Jamunapari crossbred doe was kidded once. Goat was bred eight months back and no parturition signs were observed. All clinical signs were normal. In ventral abdominal palpation no palpable fetal parts were felt and bilateral abdominal distension noticed. The present case study was diagnosed pseudopregnancy based on history, clinical signs and treated successfully with synthetic prostaglandin.

**Keywords:** Pseudopregnancy, goat, infertility

### Introduction

Goat farming is one of the important livelihoods of livestock farmers in Nagapattinam districts of Tamil Nadu. Goats are seasonal breeders and they are ready for breeding only in winter months when the day time is shorter. Goats usually become anestrus during summer period. Reproduction is the backbone of animal production. Hence, increasing the reproductive efficiency of goat plays a pivotal role [1]. Pseudopregnancy is one of the important uterine pathology of goats that affects infertility [2]. It is a condition of mated and non-mated goats in breeding and non-breeding season characterized by the accumulation of aseptic fluid in the uterine lumen [3]. It causes anoestrus and produces temporary infertility in goats [4]. It is also called as hydrometra or mucometra [5]. Pseudopregnancy mostly affects older goats compared to younger goats [6]. Therefore, present article describes about the diagnosis of pseudopregnancy and its successful management.

### History

The case study was conducted at the village of Nagapattinam districts of Tamil Nadu. Animal was presented from unorganized farm. It was three year old Jamunapari cross bred doe and kidded once. The doe was bred eight months before and not showing any parturition signs.

### Clinical examination

The animal was active and alert. All the vital signs were normal. Mucous membrane was pale in appearance. Urine and pellets voided normally. Abdomen was distended bilaterally and appeared as pregnant animal. Fetal parts were not palpated during ventral abdominal palpation and vaginal discharge was absent. But teats were engorged.

### Treatment

The animal was treated with a total dose of 125µg synthetic prostaglandin PGF<sub>2α</sub> (Cloprostenol® injection Vet, 250µg/ml, Intas pharmaceuticals) intramuscularly. The dose was repeated once, after twelve days. After the treatment of animal was recovered and began to show normal oestrous symptoms and bred with buck.

### Discussion

Pseudopregnancy is an anestrus condition in which fluid accumulates inside the uterus with persistence of corpus luteum (CL) and absence of fetus and placentomes [7]. It is associated with high plasma progesterone level secreted by persistent CL, cessation of cyclic activity and distended abdomen [8]. The primary clinical sign is accumulation of fluid within the uterus (Hydrometra) due to higher prolactin concentration in pseudopregnant does [9].

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Pseudopregnancy in goats most often affects older, parous does especially between 3-6 years old [6]. It could be diagnosed by ultrasonography [3, 9]. When it not diagnosed, pseudopregnancy can persist for up to 120-150 days before it could resolve spontaneously [10].

Treatment of the pseudopregnancy involves luteal regression by administering a single or double dose of luteolytic drug prostaglandins or its synthetic analogs [4, 11, 12].

In field condition performing ultra sonographic is difficult. In the present case was diagnosed as pseudopregnancy based on the history and the signs of animal that showed bilateral distention and no palpable fetal parts. Animal was successfully treated with synthetic prostaglandins. After its recovery showed oestrous signs and mated with buck.

### Conclusion

Pseudopregnancy is one of the important reproductive disorder of goats often mislead as pregnancy. Hence proper diagnosis and early treatment will avoid economic loss to the farmer.

### References

1. Greyling J. Applied reproductive physiology. In: Solaiman, S.G., editor. Goat Science and Production. 1st ed. Wiley-Blackwell, USA, 2010, 140-155.
2. Gonzalez-Bulnes A, Pallares P, Vazquez M. Ultrasonographic imaging in small ruminant reproduction. *Reproduction in Domestic Animals*. 2010; 45:9-20.
3. Moraes EPBX. Hydrometra and mucometra in goats diagnosed by ultrasound and treated with PGF2 $\alpha$ . *Revue de Medecine Veterinaire*. 2014; 1:33-39.
4. Souza JM, Maia AL, Brandao FZ, Vilela CG, Oba E, Bruschi JH. Hormonal treatment of dairy goats affected by hydrometra associated or not with ovarian follicular cyst. *Small Ruminant Research*. 2013; 111:104-109.
5. Reddy R, Arunakumari G, Anil KR, Muralimohan K, Sunil A. Efficacy of cloprostenol therapy in hydrometra goats. *Indian Journal of Animal Reproduction*. 2014; 35:39-41.
6. Purohit GN, Mehta JS. Hydrometra in goats (*Capra hircus*): Clinical analysis of 26 cases, *Ruminant Science*. 2012; 1:117-119.
7. Hafez B, Hafez E. *Reproduction in Farm Animals*. Edn 7, Lippincott William and Wilkins, USA, 2000, 261-270.
8. Noakes DE, Parkinson TJ, England GC. *Veterinary Reproduction and Obstetrics*. Edn. 9, W. B. Saunders, Elsevier, USA, 2009, 576-577.
9. Taverne MAM, Hesselink JW, Bevers MM, van Oord HA, Kornalijnslijper JE. Aetiology and endocrinology of pseudopregnancy in the goat. *Reproduction in Domestic Animals*. 1995; 30:228-230.
10. Taverne MAM. Overview of Pseudopregnancy in goats. In: *The Merck Veterinary Manual* (Kahn CM, ed.). Edn. 10, Merck & Co. Inc, White House Station, New Jersey, USA, 2010, 1269.
11. Simon S, Vergis J, Krishnan GS, Arun A, Vishnuraj MR, Rekha V. Pseudopregnancy in goat. *Journal of Indian Veterinary Association*. 2010; 8:17-19.
12. Murugavel K, Antoine D. Hydrometra in a goat. *The Indian Journal of Animal Reproduction*. 2014; 34:56-57.