

Conception Failure in Female Dogs

Ankesh Kumar*

Assistant Professor,
Bihar Veterinary College
Bihar Animal Sciences
University Patna-14



Open Access

*Corresponding Author

Ankesh Kumar*

Article History

Received: 3. 11.2021

Revised: 12. 11.2021

Accepted: 19. 11.2021

This article is published under the terms of the [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/).

INTRODUCTION

Estrus cycles in bitches are regulated by specific events in the brain, nervous system, and sexual organs. Conception problems in the bitch can occur at different stages of the reproductive cycle and causes may vary from behavioural to endocrinological. The meaning of infertility in animals is the failure to produce offspring. The wrong time of mating is the most common reason for failure of conception or by male side problem may be deficient in quality sperm. The improper timing of breeding is an important reason. The absence of estrus cycle, irregular ovulation, failure to conceive, or prenatal death. The treatment depends largely on the symptoms and cause of the condition, but may include hormone administration, antibiotics, or surgery. Depending on the cause, prognosis can range from good to bad.

Infertility in female dogs due to the improper breeding management or male infertility, absence of estrus cycle also due to something more serious, such as ovarian cysts or tumours, hormonal problems, and infectious diseases. Possible symptoms include refusal to breed, failure to cycle, split heats, and uterine infections.

Diagnosis of Infertility (Female) in Dogs

- Physical examination of general body
- Complete blood count
- Serum biochemistry profile
- Urinalysis
- Ultrasonography
- If breeding practices and timing are appropriate, determine whether it is the female or male that is infertile.
- Semen evaluation of the male may be required to rule out male infertility

- Measurement of the serum progesterone concentration, which is a female hormone that helps to prepare the uterus for pregnancy and maintain pregnancy. Measurement of this serum during pre-estrus and estrus cycles can determine ovulation time and optimize the management of breeding.
- Serologic test for Brucella canis
- Bacteria cultures of the reproductive tract
- Adrenal gland hormone or thyroid hormone testing for symptoms suggesting hyperadrenocorticism or hypothyroidism
- Serologic testing for herpes virus
- Serologic testing for Toxoplasma (a disease caused by a parasite)
- Exploratory surgery if the reproductive tract requires further examination or to obtain a biopsy of the uterus or ovaries
- Administered antimicrobial to treat infections in the reproductive tracts
- Artificial insemination may be an option that can be considered, depending on the cause of the infertility
- If the dog has hypothyroidism, a thyroid hormone will be administered
- Ovariectomy (surgical removal of ovaries) or ovariectomy (complete removal of reproductive organs, usually done if the uterus is damaged)
- A hormone called gonadotropin can be used to induce ovulation
- Hormonal treatment can also work on male dogs with low sperm counts or poor libido. On the other hand, hormonal treatment can also be used for prevention of pregnancy after undesired mating.
- Surgery may be a course of treatment. Possible surgeries include corrections of vaginal abnormalities, repair of an obstructed reproductive tract, drainage of ovarian cysts, and removal of a cancerous ovary. If an ovarian cyst or tumour is the cause, it is removed quickly so that the fertility can be restored and because secretion of excess oestrogens may cause cystic endometrial hyperplasia-pyometra complex and non-regenerative anaemia.

Treatment of Infertility (Female) in Dogs

Before any course of treatment is decided, first rule out the improper breeding management as the cause of the infertility. In many cases, this is done by mating a male with another female to determine if he is capable of impregnation.

- Administered hormones for stimulation of the ovaries
- Administered the hormones that help to maintain pregnancy



Redemptions from infertility

Redemptions of infertility largely depend on the underlying reason of the problem. Because improper breeding management is the most important cause, there are many records of good prognosis. If a surgical treatment is required, prognosis is less positive. If improper

breeding management is the cause, there are certain techniques available to avoid this, such as vaginal cytology (a test used to understand how the cells in the vagina function), endoscopic appearance of vaginal folds, and progesterone assays.

REFERENCES

- Angelika von Heimendahl (2008). Conception Problem in the bitch In British Small Animal Veterinary Congress 2008. BSAVA2008.
- Bartoš, L., Bartošová, J., Chaloupková, H. (2016) A sociobiological origin of pregnancy failure in domestic dogs. *Sci Rep* **6**, 22188, <https://doi.org/10.1038/srep22188>
- Catherine Barnette (2021) Infertility in Female Dogs (Breeding, Medical Conditions, Treatment, Pet Services) <https://vcahospitals.com/know-your-pet/infertility-in-female-dogs>
- Freshman, J. L. Clinical approach to infertility in the cycling bitch. *Vet. Clin. N. Am.-Small Anim. Pract.* 21, 427–435 (1991).
- Hafez E.S.E. (1967) Reproductive Failure in Domestic Mammals. In: Benirschke K. (eds) *Comparative Aspects of Reproductive Failure*. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-48949-5_3
- J. Verstegen, G. Dhaliwal, K. Verstegen-Onclin, (2008) Canine and feline pregnancy loss due to viral and non-infectious causes: A review, *Theriogenology*, 70 (3): 304-319 <https://doi.org/10.1016/j>