

Birth control pills for female cats and dogs are medicines whose use must be supervised by a veterinarian

Birth control pills intended for pets can have serious side effects in treated animals. Since 2012, therefore, they must be prescribed by a veterinarian and used in accordance with a number of recommendations. Despite this, the incidence of adverse effects has continued to rise. In order to improve the prevention of risks to treated animals, additional information will be provided in the summaries of product characteristics and package inserts of these medicines, and the number of pills sold in each box will be reduced. Information messages will again be issued to alert owners and healthcare professionals (veterinarians and pharmacists). Lastly, the monitoring of adverse effects will be increased, in order to assess the effectiveness of the risk minimisation measures taken.



Megestrol acetate or medroxyprogesterone birth control pills have long been a common form of contraception for pets, as they are inexpensive and readily available without a prescription from pharmacies or veterinary clinics. Nevertheless, veterinary pharmacovigilance data accumulated over time have revealed the occurrence of serious and potentially fatal adverse effects in treated animals. In 2012 (shown by a red arrow in Figure 1), therefore, it was decided that these medicines would only be available on prescription after a consultation with a veterinarian. Despite the introduction of this measure and the fall in the use of these products, the incidence of serious adverse effects has continued to rise (Figure 1).

An increased risk of developing serious uterine or mammary gland diseases

The use of these medicines, which have a progestational effect, can cause numerous adverse effects in female cats and dogs. These have been documented in the scientific literature and reported in the many adverse effect reports received each year by the French Agency for Veterinary Medicinal Products (ANSES-ANMV). Behavioural or dietary changes (polyphagia) have mainly been described. However, more serious disorders are regularly observed, particularly in the reproductive system (inflammation of the uterus, uterine infections and tumours, ovarian cysts, vaginitis) and the mammary glands (mammary hyperplasia, tumours).

Cases of diabetes mellitus have also been reported. These side effects require prompt action and surgical and/or medical treatment.

A retrospective review of pharmacovigilance reports received by ANSES-ANMV between 2016 and 2019 found that the treated cat died in 20% of the 80 cases reporting the occurrence of reproductive tract and/or mammary gland disorders following administration of a contraceptive containing megestrol acetate. The number of animals and their mortality according to the observed disorder are shown in Figure 2.

Seven cases of adverse effects in bitches on contraceptives were also reported, including one death.

Adverse effects sometimes after several administrations

Depending on the effect sought (prevention or interruption of oestrus), megestrol acetate pills are administered every one to two weeks during the desired prevention period, or daily for a few days. The analysis of pharmacovigilance cases showed an increased risk of side effects with a longer duration of treatment. However, some adverse effects were also observed after less than 3 months of use (Figure 3).

Figure 3 details the adverse effects in female cats treated with megestrol acetate pills for preventing oestrus (76 animals), according to the time to onset of clinical signs.

Lastly, the analysis found that the risk of serious adverse effects increased in the event of overdose.

Precautions to be taken to limit adverse effects

The administration of oral contraceptives to female cats and dogs is far from innocuous. While they remain rare, their adverse effects concern healthy animals, meaning that the benefit/risk ratio of such treatments needs to be assessed on a case-by-case basis.

In order to prevent or interrupt oestrus in female cats and dogs and avoid unwanted pregnancies, a consultation with a veterinarian is therefore necessary. Faced with all the different possible methods of birth control, veterinarians are best placed to suggest the most appropriate solution according to the profile of the animal in question: either surgical sterilisation, which is the only definitive (irreversible) method, or medicated contraception, either in the form of injections (which can only be carried out by the veterinarian), or pills as described in this article (which can be administered by the owner).

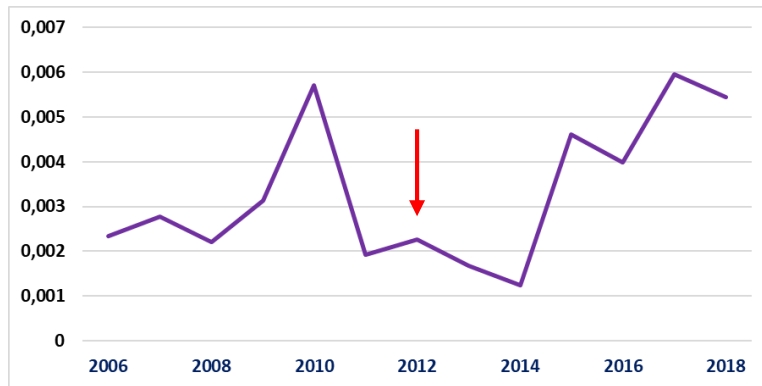


Figure 1: Change in the incidence of adverse effects occurring in female cats (% of treated animals) following the administration of megestrol acetate pills between 2006 and 2018. Source: ANSES-ANMV veterinary pharmacovigilance network.

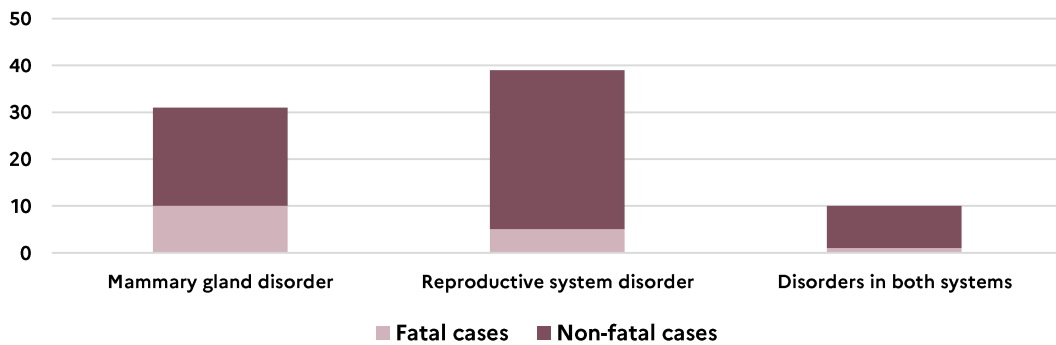


Figure 2: Number of reports of adverse effects in female cats treated with megestrol acetate pills between 2016 and 2019, according to the affected system (n=80). Source: ANSES-ANMV veterinary pharmacovigilance network.

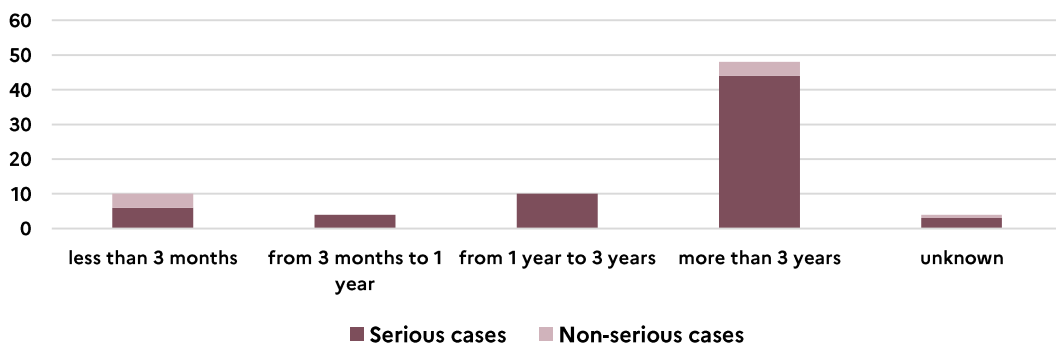


Figure 3: Number of reports of adverse effects in female cats treated with megestrol acetate pills between 2016 and 2019, according to the duration of treatment (n=76). Source: ANSES-ANMV veterinary pharmacovigilance network.

If pills are the chosen method, the following precautions must be taken:

- It is essential to consult a veterinarian to determine the most appropriate treatment and limit the risk of adverse effects,
- Treatment should cease immediately and a veterinarian should be contacted if any adverse effects occur,
- As the risk of serious adverse effects increases with the duration of treatment, administration should be limited to what is strictly necessary and, for the longer term, sterilisation should be considered,
- As the risk of serious adverse effects increases in the event of overdose, the animal should be weighed before each treatment and the dose adjusted to its weight,
- In the event of prolonged treatment (more than three months), the veterinarian should organise regular visits.

At ANSES-ANMV's request, these recommendations will soon be included in the package leaflets and summaries of product characteristics of oral contraceptives.

New risk minimisation measures

New measures to minimise the risk to treated animals are also planned:

- Reduction in pack size so that the permitted treatment period after a box of medicine has been dispensed does not exceed three months for the prevention of oestrus in a 5 kg cat.
- Increase in surveillance of the reported adverse effects.

To make pet owners aware of the inherent risks of administering these treatments and the resulting precautions for use, ANSES-ANMV published an alert¹ on [anses.fr](https://www.anses.fr). Communications informing veterinarians and pharmacists of the new measures were also published in the trade press.

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1. <https://www.anses.fr/en/content/birth-control-pills-female-cats-and-dogs-must-be-prescribed-veterinarian>