



FAQ: Should we be using birth control for cats now that we can't spay/neuter them?

You may have heard some shelter medicine experts and the Alliance for Contraception in Cats and Dogs (ACC&D) promoting the use of a birth control medication called **megestrol acetate** (MA) to slow the tide of the kitten flood sure to come this spring if we can't spay outdoor cats.

Quick answer:

- Low doses have been used with success to temporarily suppress estrus in community cat colonies, but little scientific evidence exists for efficacy and safety
- Side effects could be an issue, so consultation with a veterinarian is required before prescribing, and care should be taken when handling the medication and dosing it to cats
- The medication for cat doses is only available through a compounding pharmacy and it is not FDA approved in cats
- If other litter prevention techniques won't work for you (separating males and females, for instance), do your homework first, then share your data with ACC&D

The nitty gritty:

MA is a potent synthetic progestin hormone that has actually been used for many years in many species. Two early studies on its effects in cats were published in 1977. Unfortunately, there hasn't been much in the way of actual controlled clinical research on this medication since then. At the high doses originally studied (0.5mg/kg daily), many serious side effects were reported. These included pyometra, mammary cancers and mammary enlargement (males and females), diabetes (maybe reversible), adrenal gland dysfunction (maybe reversible), uterine disease (reversible), and finally, birth defects, dystocia and failure to produce milk in pregnant cats. MA can also be dangerous to the people administering it, since it can be absorbed through the skin, so gloves must be worn by people handling and administering this medication.

More recently, some veterinarians and community cat caretakers have advocated for using low doses of MA, anywhere from 0.625mg/kg weekly to 0.1-0.2mg/kg weekly as a stop-gap before spay/neuter in community cat management. We have some evidence of side effects for use at intermediate doses, because MA is used in other countries to treat other feline endocrine conditions (MA attaches to glucocorticoid receptors just like prednisone), and mammary enlargement and adrenal dysfunction are still problematic. In Europe, an antidote medication is available if these effects are seen- but this isn't available in the US. Anecdotal reports of using extra low doses in colonies of feral cats report fewer side effects and fewer kittens, but there is limited to no scientific research data on efficacy or safety at those doses to guide us.

MA should not be used in male cats or in pregnant cats for the reasons mentioned above, kittens under 4 months old due endometrial disease, or cats with other endocrine disorders. MA does not prevent lactation in queens already nursing, but we don't know about its concentration in milk. So that leaves us with **healthy**,

non-pregnant, >5-month-old female cats. In order to confirm whether use is appropriate, Romagnoli et al in 2015 recommended the following: detailed history, clinical exam, abdominal and mammary palpation, and a vaginal swab with cytology. A quick abdominal ultrasound would also be ideal.

So, should shelter veterinarians be using this medication? Here are the risk factors we would like you to consider:

- Is the cat likely to become pregnant?
- Can you not mitigate the risk some other way?
- Remove all males from household, don't allow cat out, rehome or re-foster, etc.
- Have you already examined the cat and/or would examining the cat be possible without compromising owner, staff or foster parent social distancing?
- In some cases, for example, an outdoor cat for whom pregnancy is extremely likely, a telehealth prescription might be appropriate, depending on VPCR requirements in your state.
- Can the cat be safely medicated (in food, liquid in syringe, or capsule) by an informed and prepared caretaker (wearing gloves)?
- Do you have a plan in place for side effect management?
 - o Some of these side effects, even at very low doses, can be fatal.
- Is the shelter management and/or pet owner okay with using an experimental drug not approved by the FDA for this particular species/usage?
- Are you willing to collect data about dosing/side effects/success for the good of science?

If the answer to all of the questions above is YES, then a trial run of low-dose MA may be right for this cat. To procure the drug, you will need to call your local compounding pharmacy, (Dr. Julie Levy recommends 0.625mg/kg weekly, so 2.5mg/ml liquid) and order MA either as "office stock" to your shelter if owned by the shelter, or as an individual prescription that can be shipped directly to the owner. The 20mg FDA approved canine MA tablet (OvaBan™) does not dissolve in liquid and should not be used to self-compound. For in heat cats, double your dose and give daily for 3 days before switching to a weekly schedule. Not recommended for treating longer than 30 weeks.

Finally, if you do decide to test this medication out for a few months, please share the results of your treatment trial. Contact the ACC&D to let them know how things are going.

Resources:

- 1. Houdeshell, JW, Hennessey, PW. Megestrol acetate for control of estrus in the cat. Vet Med Small Anim Clin 1977; 72: 1013–1017
- 2. Oen, EO. The oral administration of megestrol acetate to postpone oestrus in cats.
- 3. Nordisk veterinaermedicin 1977: 29 (6)
- 4. Romagnoli S. Progestins to control feline reproduction: Historical abuse of high doses and potentially safe use of low doses. *J Feline Med Surg*. 2015;17(9):743-752. doi:10.1177/1098612X15594987
- 5. Greenberg, M., D. Lawler, S. Zawistowski, and W. Jochle. "Low-dose megestrol acetate revisited: A viable adjunct to surgical sterilization in free roaming cats?" Veterinary Journal (2013) 196:304-308
- 6. Alliance for Contraception in Cats and Dogs COVID-19 response page: https://acc-d.org/available-products/progestin-contraceptives/covid-19-updates
- 7. Levy/Greenberg Webinar: https://alliance-for-contraception-in-cats--dogs.mailchimpsites.com/