Dr. Nancy Kay, DVM, DACVIM

Nancy has more than 30 years of experience in the veterinary industry and is a board-certified veterinary specialist in internal medicine as well as a valued member of IDEXX's Pet Health Network team since 2014.

I first wrote about Zeuterin in 2012 because I was excited to learn about a product used to chemically, rather than <u>surgically</u>, <u>neuter</u> male dogs. At the time, Zeuterin was undergoing studies for FDA approval. <u>Ark Sciences</u>, the manufacturer of Zeuterin, received that approval in early 2014 and since then, the use of this product has rapidly accelerated within the United States.

I recently completed the specific training required for <u>veterinarians</u> to purchase and use Zeuterin. My training began with an online instructional webinar. Next I completed a wet lab during which I Zeutered three dogs under the watchful eye of a certified trainer. I had the good fortune of working with certified trainer, <u>Dr. Laureen Bartfield</u>. She is the director of SNAP-NC (Spay Neuter Assistance Program of North Carolina), and has Zeutered hundreds if not thousands of dogs.

The Zeutering process

From start to finish, the Zeutering process required no more than 10 to 15 minutes. Keep in mind, things would have been easily twice as quick had I not been learning the procedure for the first time. Here's how the Zeutering worked:

- **Step one:** The dog received a thorough
 physical examination to make sure there were no known problems that would interfere with a positive outcome. For example, if a dog had significant skin irritation around the scrotum, he would have been disqualified from being Zeutered that day.
- Step two: Each dog was sedated to very lightly anesthetized. The goal was to sedate to the point that the dog was willing to lie on his back without struggling. We used a sedation drug called dexmedetomidine, the effects of which were readily reversed by another drug

- immediately following the procedure.
- **Step three:** Using calipers, the size of each testicle was measured in order to determine and draw up the exact volume of Zeuterin needed for each testicle into two separate syringes.
- Step four: Using a slow, steady technique, the appropriate volume of Zeuterin was injected into the center of each testicle. Pain receptors within the testicles respond primarily to changes in pressure, so the key to keeping the dogs comfortable was injecting the Zeuterin very slowly.
- **Step five:** A green "Z" was tattooed within the skin adjacent to the sheath (just in front of the scrotum). Given that the testicles remain, this tattoo announces to the world that the dog has indeed been neutered.
- Step six: The dogs were sent home within a couple of hours of being Zeutered. They received an injection of pain medication along with a few days worth of oral pain medication to be given at home. This is a standard recommendation for dogs who have been Zeutered. There is no need for a follow up visit unless concerns arise. Clients were advised that their dog would have some scrotal swelling for the first few days. They were also told that their dogs would not be 100% sterile until 60 days following Zeutering.

Impressions of Zeutering

Following my first hands on experience with Zeuterin, here are my impressions:

- The Zeutering process is precise, but easy to learn.
- Zeutering is a quick process.
- Zeutering is a safe process.
- The Zeutering process appears to be pain-free.
- Recovery from Zeutering is rapid.
- Zeuterin provides a safe and effective means to neuter male dogs.

Questions for your veterinarian

- Are you familiar with Zeuterin?
- Have you received the training necessary to administer Zeuterin?
- Do you think that Zeuterin is a good alternative









for my dog?

If you have any questions or concerns, you should always visit or call your veterinarian -- they are your best resource to ensure the health and well-being of your pets.



