

EMANCIPET

HEARTWORM TREATMENT INFORMATION PACKET

We recommend treating adult heartworm (HW) infections with 3 injections of a drug called melarsomine. This treatment kills the adult heartworms quickly and reduces the amount of damage that they do to the heart and lungs. Heartworm treatment can have significant side effects, and potentially even death. To reduce the risk to your pet, please follow these guidelines.

1. **STRICT CAGE REST FOR 60 DAYS:** This is the single most important factor to a successful HW treatment with melarsomine. This means 4 weeks of strict cage rest for your dog after each melarsomine injection. If the heart rate and breathing rate are kept low while the worms are dying and dissolving, there is less chance of the worm fragments moving into the lungs and causing severe damage, or even death, in your dog. Your dog can only walk outside on a leash to eliminate, and must otherwise be in a kennel (or other area in which they are calm) from the time of the first injection, through 28 days after the third injection.
2. **HEARTWORM PREVENTION:** Your dog must be on HW prevention for a minimum of 60 days before the first injection of melarsomine. Heartworm prevention is given beforehand to make sure that all the worms in your dog's body are old enough to be eliminated by the melarsomine. We strongly recommend continuing monthly heartworm prevention throughout treatment and for the duration of your pet's life to prevent re-infection.
3. **DOXYCYCLINE:** Your dog must take a 30-day course of doxycycline, an antibiotic, before the first melarsomine injection. This specific antibiotic has been shown to kill bacteria inside heartworms that are vital to the worms' health. This helps by making the worms more vulnerable to the melarsomine. More importantly, killing the bacteria results in less life-threatening inflammation of the lungs during the treatment.

To reduce the anxiety your pet may feel when receiving melarsomine injections, we will provide you with trazodone, a mildly sedating anti-anxiety drug to be administered at home before each injection. The melarsomine injections can be very painful for your dog. We take this very seriously and provide effective pain management as part of the HW treatment package. We provide take-home pain medication and a strong anti-inflammatory drug to minimize the body's reaction to the dying worms. You cannot give your dog any NSAIDs (including Aspirin, Carprofen, Meloxicam, Previcox, etc.), while they are on the anti-inflammatory drug (Prednisone).

The first melarsomine injection is given after your pet has had a minimum of two months of HW prevention, and has completed 30 days of doxycycline treatment. The second injection is given one month later, and the third injection is given 24 hours after the second injection. This treatment protocol allows for the first injection to kill some of the worms and let the body clear them. The second and third injections will kill the remaining worms. By spreading out the treatment, there is less stress on the body, and the treatment is less risky for your dog.

A microfilaria test will be performed one month after the third injection to confirm that juvenile heartworms have been killed. An antigen test will be performed nine months after the third injection to confirm that adult heartworms have been killed, and your pet is cleared of the HW infection.

EMANCIPET

WHAT TO EXPECT ON EACH VISIT?

Initial Consultation (today):

- The veterinarian will examine your pet, and we will perform a confirmation test if that has not already been done.
- Doxycycline (an antibiotic) will be sent home with your dog, to be given for 30 days.
- Tri-heart (heartworm prevention) for two or more months will be sent home, if needed.
- Make appointments for the melarsomine injection series and subsequent retests.

Visit #1 (60 days from today):

- You will give your dog oral trazodone (sedative) at home, 30 minutes to one hour prior to arrival at the clinic.
- Blood work will be performed to check your dog's liver and kidney function before the first injection is given.
- Examination is performed by a veterinarian.
- Melarsomine injection #1 is given in a lower back muscle.
- Prednisone (a strong anti-inflammatory) is sent home on a 4-week tapering dose.
- Tramadol (pain medication) is sent home for 3 days.
- You will place your pet under *strict* cage rest.

Visit #2 (30 days after Visit #1):

- You will give your dog oral trazodone (sedative) at home 30 minutes to one hour prior to arrival at the clinic.
- You will complete a brief survey about the side effects observed during the first 10 days following injection #1.
- Examination is performed by a veterinarian.
- Melarsomine injection #2 is given in a lower back muscle.
- Prednisone (a strong anti-inflammatory) is sent home on a 4-week tapering dose.
- Tramadol (pain medication) is sent home for 3 days.

Visit #3 (24 hours after Visit #2):

- You will give your dog oral trazodone (sedative) at home 30 minutes to one hour prior to arrival at the clinic.
- Examination is performed by a veterinarian.
- Melarsomine injection #3 is given in a lower back muscle, on the opposite side of the back than the previous day's melarsomine injection.
- You will continue *strict* cage rest until the next visit.

Visit # 4 (30 days after Visit #3):

- You will complete a brief survey about the side effects observed during the first 10 days following injections #2-3.
- Examination is performed by a veterinarian, and we will retest your pet for the presence of juvenile heartworms.
- Make appointment for the heartworm antigen retest, which confirms that all adult heartworms have been eliminated.

Visit # 5 (8 months after Visit #4):

- You will complete a brief survey about lingering symptoms after the completion of treatment.
- Examination is performed by a veterinarian and we will retest your pet for the presence of adult heartworms.

EMANCIPET

TIPS AND TRICKS FOR HW TREATMENTS

Medications:

- Try to make taking pills a pleasant experience for your dog, as they will need to take quite a few during their treatment period.
 - Act excited that it is time to take their medicine! They pick up on your enthusiasm.
 - Make sure to tuck the pill into some soft food that they like. This makes it yummy, and the food will coat the pill making it easier to swallow, thus preventing your pet from tasting any bitterness. Change it up as needed to keep them interested. Examples:
 - Soft cheeses (Velveeta, cream cheese, etc.)
 - Pieces of hot dog or sausage
 - Lunchmeat
 - Peanut butter
 - Marshmallows
 - Pill pockets
 - Some ideas on pets that are difficult to pill:
 - * *We have information available upon request to assist with this process.*

Keep your pet calm and resting during the ENTIRE treatment period:

- This is critical to your pet's successful HW treatment! After the initial post-injection period, most dogs feel well enough to play and resume normal activity. However, it is crucial that you keep your pet's heart and breathing rates low after HW treatment.
 - Find out if your dog is comfortable being in a crate for long periods of time.
 - You could purchase or borrow a crate if you do not already have one. Or, if your dog does not like to be crated, you may set up a bathroom or small bedroom to use as a recovery space.
 - * *We have additional information on crate training available by request.*
 - Get a supply of chew toys, interactive food puzzles, and other toys to help keep your dog occupied during their recovery.
 - We can send home additional calming medications if the above recommendations are not adequate.
- Plan to walk your dog on a leash to urinate and defecate outside, then bring your dog back into the house immediately afterward. Do not allow your dog to go outside off-leash to urinate and defecate, regardless of how small your yard is, until the completion of the recovery period.
- The recovery period will be from the first melarsomine injection on visit #1 until visit #4.

WHAT TO EXPECT AFTER EACH INJECTION:

The melarsomine injections can be very painful for your dog. Please be sure to give your first dose of Tramadol (pain medication) and prednisone (anti-inflammatory) by 8 pm.

Expected side effects of the medications:

Prednisone will make your dog hungry and very thirsty at the beginning of the dosing schedule. Make sure that your dog always has access to water, and make plans to let them out to urinate more frequently, especially while on the first week of prednisone. As the dose decreases, these side effects should lessen.

EMANCIPET

Doxycycline could upset your dog's stomach, so try to give with a little food, or ideally after a full meal.

Tramadol can make your dog sleepy and decrease their appetite.

Pain and discomfort:

- **Right after the injections:** The melarsomine injections are painful, and your pet will be very sore over his/her back for 1-4 days after each injection. Your dog may also not want to eat or do very much in the first few days after an injection. Be sure to give all of the prescribed medications, as they will help significantly with the pain.
 - For additional pain relief, ice pack the area for the first 24-48 hours to further reduce the pain and swelling.
 - Apply an ice pack or a bag of frozen peas wrapped in a hand towel to the injection site for 10-minute intervals up to every hour over the next 2 days.
- About 1/3 of dogs will develop significant swelling over the injection sites. This will reduce over several weeks. Any swelling present for more than four weeks should be brought to the attention of the doctor.

Watch closely for signs of coughing, difficulty breathing, fever, or weakness. These could be the first signs that your dog is having a serious complication after treatment. Please call our emergency number immediately for further advice.

Please be aware that dogs over 8 years of age have more lethargy, anorexia/low appetite, and vomiting than younger dogs.

Upon arrival for visit #2 and visit #4, we will ask you to complete a short survey about the following side effects observed 10 days after the injection:

Reactions at the injection site

- pain, swelling, redness, or the formation of an abscess

Respiratory symptoms

- abnormally rapid breathing, an onset or change in labored breathing, an onset or change in coughing, or coughing up blood

Gastro-intestinal

- vomiting, diarrhea, or decreased appetite

Behavioral changes

- salivation, trembling, whining, lethargy, or reluctance to move

For more information about heartworm disease and treatment from veterinary experts, please go to www.heartwormsociety.org

PLEASE CALL WITH ANY EMERGENCIES

512-587-7729

or if after 6 pm, please call 512-773-5704

(This number goes straight to a dedicated heartworm technician.)