

Treatment of Canine Sarcoptic Mange

Effective Date: 10/15/2021

Revised:

Responsible Staff:

- Vet techs

Purpose: This SOP provides vet techs with a step-by-step procedure for diagnosis and treatment of dogs with sarcoptic mange. Treatment consists of the extralabel use of a parasite product shown by clinical studies to be effective in eliminating sarcoptes mites and resolving skin lesions in 1-2 months.

Canine Sarcoptic Mange Facts

- Sarcoptic mange or scabies = skin disease caused by infection of the epidermal layer of the skin in dogs by *Sarcoptes scabiei* mites. Infection is acquired from close contact with infected dogs.
- Clinical signs are similar to demodex mange with alopecia, inflammation, and crusts. Lesions generally appear on face, ear margins, elbows, and hocks, but can spread to the entire body. The burrowing mites in the epidermis cause intense pruritis. Skin trauma from constant scratching causes secondary bacterial skin infections and bleeding wounds.
- Canine sarcoptic mange **IS CONTAGIOUS** to other dogs and to people.

Supplies Needed

- Disposable exam gloves
- Size 10 scalpel blade with dulled edge
- Mineral oil
- Glass microscope slides with cover slips
- Microscope with 10X objective
- Bravecto chewable tablets for adult dogs
- Nexgard chewable tablets for puppies
- Sharps box for scalpel blade disposal

Procedures

1. Wear clean exam gloves.
2. Open the animal's medical record in Chameleon.
3. Ensure that the animal's ID neckband and description match the medical record.
4. Weigh dog
5. Perform a superficial skin scrape in several affected areas using the size 10 scalpel blade. Scraping the edges of the ear pinnae, the elbows, and the hocks are more apt to yield positive results. Multiple scrapes are necessary as the mites may be present in low numbers.
6. Transfer the skin scrapings from the scalpel blade to a drop of mineral oil on a glass microscope slide. Place a cover slip on top of the oil.
7. Examine the entire area under the coverslip with a microscope with the 10X objective.
8. Look for adult mites and eggs. Refer to pictures posted by the microscope.
9. Record the skin scrape results in the medical record.

10. **A negative skin scrape does not rule out sarcoptes infection. If sarcoptes is suspected based on clinical signs with intense pruritis, then treat.**
11. **Dogs \geq 6 months old** (all permanent teeth): Administer one **Bravecto** chewable tablet to dogs with positive skin scrapes. Use the strength recommended for the body weight. Record in the medical record.
12. **Puppies $<$ 6 months old** (deciduous teeth): Administer one **Nexgard** chewable tablet to dogs with positive skin scrapes. Use the strength recommended for the body weight. Record in the medical record.
13. Start the dog on oral cephalexin at a dose of 15 mg/lb given twice daily with food for 14 days. Record in the medical record.
14. Consult with the veterinarian about prescribing the following additional medications
 - a. Carprofen for inflammation
 - b. Gabapentin for pain
 - c. Triple antibiotic ophthalmic ointment for purulent ocular discharge and eye discomfort
 - d. Otic solution containing antifungal, antibiotic, and anti-inflammatory medications for inflamed and pruritic ears
15. Sarcoptic mange dogs should stay in the shelter for at least 2 weeks since the infection is contagious to other dogs and can be zoonotic. Most if not all mites are eliminated by 2 weeks after treatment but it may take a month for resolution of the skin disease.
16. Ensure that a sign indicating "Sarcoptic mange - do not handle or place near other dogs" is placed on the dog's run.
17. Recheck progress at 1 week, 2 weeks, and 4 weeks post treatment. Repeat superficial skin scrapes at 2 weeks and 4 weeks. Mites should be eliminated by 4 weeks post treatment.