

VETERINARY DERMATOLOGY CENTER

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METHICILLIN-RESISTANT STAPH INFECTIONS IN DOGS & CATS: INFORMATION FOR PET OWNERS

The resistant bacteria that we most commonly find on cultures from dogs and cats include: Methicillin-Resistant Staph pseudintermedius (MRSP), Methicillin-Resistant Staph schleiferi (MRSS), and *rarely* human Methicillin-Resistant Staph aureus (human MRSA).

Infection caused by such a bacteria is likely to be unresponsive to most “everyday” antibiotics, and a bacterial culture will be necessary to identify the type of bacteria present and to help determine which antibiotic will help to resolve the infection. You will need to follow your veterinarian’s instructions very carefully if treatment is to be successful.

Please read the following very carefully:

1. Until culture results are known and until the infection is ultimately treated and resolved please isolate your pet as much as possible. In particular there should not be contact with people or pets that have a weakened immune system as a result of medical conditions or treatments. If contact cannot be avoided then people should wear gloves, and hands should be washed often (or use antiseptic hand gels). Sustained and close contact (such as sleeping with your pet) should in particular be avoided.

2. In most instances MRSP or MRSS (which we see more commonly than MRSA) will not affect healthy people or pets. If a pet has this bacteria then it likely has an underlying condition that has made it more prone to secondary infection. Skin allergies and skin parasites are the more common primary problems for pets, but other diseases may also predispose to infection. We must address and control the primary problem so the infection is less apt to recur.

3. Rarely MRSA is cultured from pets. If it’s cultured from your pet, it will be important for your entire family to see your family physician. In most instances pets that have a MRSA infection acquired the bacteria from one or more individuals in the home who may not be showing any symptoms.

4. Where did this come from? In most instances we do not know. There are likely to be multiple factors. Previous antibiotic treatments may play a role in the development of resistant bacteria, especially if the infection is not treated for a sufficient period of time or with an effective dose. Always follow your doctor’s instructions and complete the entire course of antibiotics that have been prescribed for an infection. Treatments for resistant bacterial infections typically continue until infection has been resolved for at least 2 weeks (total course may be 4-8+ weeks).

5. If possible, wear gloves and wash your pet DAILY with a chlorhexidine-based shampoo following the labeled instructions carefully. This is not a job to be delegated (esp. to children). Effective shampooing is critical, and the lather should be allowed to remain on for 5-10 minutes before rinsing well. Protect the eyes and ears. Wash towels afterwards with bleach. Shampoo outdoors if the weather allows. Clean the tub afterwards with a disinfecting cleanser. Clipping the fur may be very helpful. Pets should remain clean and dry between shampoos. Nylon collars, leashes, and toy should be washed at least weekly with the pet’s chlorhexidine-based shampoo as well. Leather collars should be discarded. Bedding should be washed weekly in hot water. Food and water bowls should be washed at least weekly with dish detergent.

6. A topical spray made from the injectable antibiotic Amikacin may be recommended. If so apply the spray lightly to infected areas every 12 hours (the area doesn’t need to be dripping wet). Prevent licking of the area until it has dried. A T-shirt or Elizabethan collar may help to prevent licking of the spray until it is dry.

7. Unconventional antibiotic treatments may need to be considered to resolve infection caused by a resistant staph bacteria:

A. Rifampin or Rifidin capsules. This is a rarely used human antibiotic. If it’s prescribed for your dog (it’s not for cats) liver tests should be performed BEFORE treatment and at least weekly (twice weekly better) DURING treatment. Even with close monitoring there could be serious reactions in some cases. If this has been prescribed, and if you see poor appetite, upset stomach, or weight loss you must stop this medication and call your doctor. Make sure that fresh water is always available.

B. Chloramphenicol tablets. This is an oral antibiotic that is uncommonly used in dogs and cats. It’s rarely used in humans because of the potential for severe reactions. In fact humans should wear gloves even when handling the tablets to prevent even a small amount from being absorbed through contact with the skin. As this antibiotic can upset the stomach in some patients other medications may need to be given to help with nausea. Blood tests may be recommended BEFORE treatment and weekly DURING treatment in some cases to monitor for possible problems. Even with close monitoring there could be serious reactions in some cases. Make sure that fresh water is always available.

C. Amikacin INJECTIONS. If this is prescribed it may have to be administered daily by injection. Clients are sometimes shown how to administer injections of this antibiotic. Because this antibiotic may affect kidney function blood tests and routine urinalysis will have to be performed BEFORE treatment and at least weekly (twice weekly better) DURING treatment. Even with close monitoring there could be serious reactions in some cases. Fresh water should always be available.

D. Doxycycline capsules or tablets. This is a common antibiotic for humans and pets, but not typically used for staph infections. If this is prescribed for your pet it should be given with a little food. In fact it’s helpful for a small amount of food to be given after the medication so you’re certain that it was completely swallowed (and not stuck in the throat where it could cause problems). Fresh water should always be available.

8. Communication will be critical. Don’t allow prescriptions to run out prior to your next appointment or your next telephone progress report with your doctor.

If you have questions, please ask at your next appointment.

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