

## A Dog's Bad Reaction to Antibiotic Injections

**Injected antibiotics can sometimes react badly with the underlying muscle.**

*Jon Geller, DVM*

Q. I recently had my 1-year-old yellow Labrador Retriever spayed. Everything went well, but two weeks after her surgery she developed a golf-ball-sized lump in the scruff of her neck. We returned to the vet and were told that it could be the result of the antibiotic she was given during her surgery. They gave her a benadryl-type antihistamine.

It has since festered into an open sore that is draining and slowly going down, but is really nasty looking. We returned to the vet, and he said it would get uglier before it got better, and she may always have the lump as a result of the scar tissue. He gave her an antibiotic called Antirobe twice daily. He also said he has never see a reaction quite like this.

Any input would be greatly appreciated. We love our vets, and we are not faulting them, unless there is something I should look into.

A. It does sound like your dog is having a bad reaction to an injection given in her neck. Typically, an injection with amoxicillin or ampicillin is given under the skin as a precaution to prevent infection following surgery.

The injection is typically given into the space between the skin and the muscle (the subcutaneous area). Occasionally, the injection may inadvertently be injected into the muscle. Although this may be more painful to a dog that is not anesthetized, it's not usually a problem.

In some cases, the penicillin-type antibiotic, or the carriers that are part of it, can react badly with the underlying muscle, setting off an inflammatory reaction. This reaction can end up as an infection, as it sounds like was possible with your dog.

Your veterinarian did nothing wrong, since the injection is labeled for both subcutaneous and intramuscular injection. This is an example of an unusual, even rare, complication from a routine injection.

As with any injection, sterility is important, of both the rubber cap on the bottle of medication and the needle itself, but these are rarely an issue. You might ask your veterinarian about this in case a new assistant may be giving injections without using sterile technique.

Best,  
Jon Geller, DVM