

Lizard Broken Leg

Did my vet set or immobilize my lizard's broken leg correctly?

By Margaret A. Wissman, DVM, DABVP

I have a female water dragon with a break in her hind leg right above the knee. The vet set and immobilized the leg as best he could. He folded the leg and wrapped it on itself. This vet didn't seem to be too knowledgeable about herps. Was this the correct way to do it or is there a better way? This happened July 24. She ate right after bringing her home and seems to be doing fine. Please respond soon as I am having the same anxiety as when my children are sick.

I have two concerns about your lizard. The first concern is about why she broke her leg. Metabolic bone disease (MBD) is a common problem with herps housed indoors and not provided with appropriate full-spectrum lighting in the UVB range. This can cause a problem with calcium uptake and utilization. MBD can cause a number of problems; the most common one being fragility of long bones, often resulting in fractures. Please check back in the archives to read about the manifestations of metabolic bone disease.

My next concern is about the fracture stabilization. Fractures of the femur, the long bone that connects the knee to the hip, can be difficult to stabilize. This is because the basic premise of fracture stabilization is that the joints above and below the fracture should be immobilized for the best chance of normal healing. This can be difficult when dealing with femur fracture. Often, the leg with the fracture is pulled straight back and taped to the body and tail. This tends to pull the bones into alignment by the muscles and it provides a stable fixation for healing. Taping the leg in the manner that you described isn't the usual way of stabilizing a femoral fracture. However, I hesitate to second-guess your vet, as I wasn't there, I didn't see your water dragon, nor did I view the radiographs. So, it is neither professional nor fair for me to render an opinion about the way the case was handled.

If you are concerned, perhaps you should ask your vet who handled your case to refer you to a reptile vet with more experience, or to a referral specialty center, if your vet admitted that he was not well-versed in herp medicine. It is always best to ask your current vet for a referral to another hospital rather than going behind his or her back to seek a second opinion. Or you can ask your vet to set up a consultation with an experienced herp vet through the diagnostic lab that they use. This is usually a complimentary service offered by the diagnostic lab and it is a great way for a novice herp veterinarian to get up-to-date information regarding specific herp cases. It is also a great way for experienced herp vets to run a case by another colleague for a second opinion. I encourage you to suggest this to your vet. The service provided can be invaluable for vets of all levels of experience and many pet herps have benefited from this service in the past.

While pain is a subjective thing, I usually prescribe an appropriate pain medication (usually meloxicam) for at least the first few days after the splint has been applied. Radiographs should be taken prior to splinting and again after the splint has been applied, optimally. Pre-splinting rads can be useful to evaluate the bone density of the entire animal, and the post-rads are also helpful in determining if the splint has provided correct alignment for healing.

If the history or any of the clinical signs indicate possible MBD, then blood work may be helpful. Calcium supplementation is often prescribed during the healing phase, to better provide the bones with essential nutrients for bone mending. If MBD is involved, then the husbandry problems must be corrected, as well. Full-spectrum lighting must be provided, and the light bulb must be kept at correct distance from the pet for proper utilization. It must also be replaced according to the manufacturer's recommendations, even though the light is still working. The necessary UVB portion of the spectrum is the first to dissipate, even though the light is still emitting visible light. In addition to support care and calcium supplementation, often calcitonin salmon is prescribed to better allow quick healing of the bones. This hormone will speed up the deposition of calcium into bone and other tissues.

In some cases, splinting is not acceptable, and it may be necessary to either pin the bone fragments that are fractured, or in some cases, external skeletal fixation (ESF) may be used. These can provide excellent stabilization in a variety of reptile fractures. Bones may also be plated in certain cases.

The good news is that if the bones are in good alignment, if she has normal calcium metabolism and if there is little movement of the bones during the healing, then chances are good that your lizard will heal eventually. In some cases, fractures can become non-unions, meaning that the bone ends do not "nit" together properly and this can be a serious problem. Rarely, the bones will become infected, usually if one or both ends protruded through the skin, becoming contaminated. However, this is not a likely occurrence.

Hopefully, in six to eight weeks, your water dragon will be good as new, if the fracture is MBD-related and the husbandry

problems are corrected. If the fracture was traumatic in origin, then healing time takes between six and 18 months. It sounds like you really care about your dragon. I hope she heals uneventfully and all's well in no time!

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Need a Herp Vet?

If you are looking for a herp-knowledgeable veterinarian in your area, a good place to start is by checking the list of members on the Association of Reptilian and Amphibian Veterinarian (ARAV) web site at www.arav.com. Look for DVMs who appear to maintain actual veterinary offices that you could contact.