

Bone Fractures in Cats

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When abnormal stress is placed upon the skeletal system, fractures or breaks of the bones may occur. All the possible fracture types and the proper corrections of fractures are described by difficult terminology. Basically, we refer to fractures not only based on the name of the bone broken but also on the characteristics of the break itself.

Types of fractures

There are four commonly seen fractures in the cat: closed, compound, epiphyseal (growth plate), and greenstick (hairline). These first three types can be further characterized by whether they are simple fractures in which the bone breaks into only 2 or 3 pieces, or comminuted where the bone shatters into many pieces.

Closed Fractures: Closed fractures are those in which the skin is not broken. The bone is fractured, but the overlying skin is intact.

Greenstick Fractures: Greenstick fractures are small cracks within the bone which leave the bone basically intact, but cracked. In other words, the bone is not completely broken.

Compound Fractures: Compound fractures are breaks in which the broken bone protrudes through the skin, and is exposed to the outside. Compound fractures are risky in that the bones can be contaminated with dirt and debris, resulting in an infection.

Epiphyseal Fractures: Epiphyseal fractures are commonly seen in young, growing cats. In animals less than one year of age, there are soft areas near the ends of each long bone where growth takes place. These soft areas are referred to as growth plates or epiphyseal plates. Because these are areas of growth, they are rich in immature non-calcified cells that form a soft, spongy area of the bone. These growth plates are more easily fractured because they are the weakest part of the bone. The distal ends of the femur (thigh bone) and humerus (upper front leg) seem to be particularly susceptible to this fracture.

What are the symptoms and risks of fractures?

The symptoms and risks depend on what area and to what extent the bone is fractured. Fractures involving a joint are the most serious. A broken back may displace the spinal cord and cause complete paralysis. All fractures, however, are serious and should be treated at once. When a bone within a leg is broken, the cat will usually hold the entire leg off the ground. Usually no weight is placed on the paw. With a sprain or lesser injury, the cat may use the leg somewhat, but walk with a limp.

What is the management?

Just as in human medicine, splints, casts, pins, steel plates, and screws can be used to realign the bone and allow healing. The treatment depends on the type of fracture, age of the cat, and which bone is broken. Compound fractures in which the risk of infection is high are treated differently than closed fractures. Growing kittens may heal in as little as five weeks, and because of their size they put less weight on the bone. Therefore, a fracture in a young kitten may be treated with a cast but the same fracture may need to be 'pinned' in a geriatric (senior) cat in which healing may take twelve weeks or more. Hairline fractures may only require rest, while surgical intervention will usually be needed in more severe fractures. Careful evaluation by a veterinarian will determine the proper treatment.

