

## Femoral Neck Fractures

### Basic facts

The top of proximal part of the femur bone consists of the femoral head, femoral neck, greater trochanter, lesser trochanter and metaphysis. The femoral head articulates with the acetabulum or the cup of the hip joint.

A fracture is synonymous with a broken bone. When a fracture occurs through the neck of the femur, the hip joint is no longer function. The most common cause of a femoral neck fracture is trauma such as being struck by a motorized vehicle or taking a fall.

### Cause of fracture

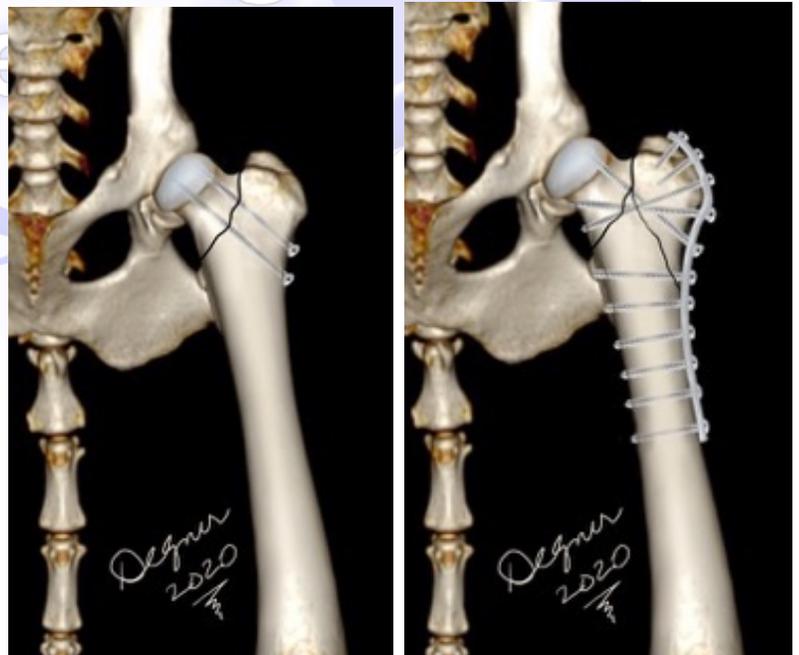
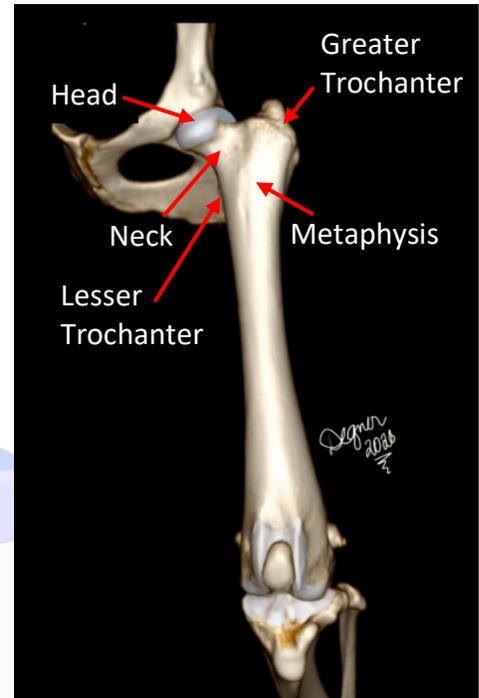
Femoral neck fractures typically are from trauma. This may include being hit by a motor vehicle or from an object or person falling on the pet.

### Diagnosis

Radiographs (x-rays) are needed to diagnose the condition of a femoral neck fracture. Other testing that may be recommended includes blood work such as a complete blood count and chemistry profile. CT scan of the body may be recommended if the pet has been hit by a car.

### Surgery

Femoral neck fractures require surgery for a successful outcome. For a simple neck fracture, two screws or a screw and a pin are usually adequately strong to allow for uncomplicated healing. If the fracture is more extensive and includes a femoral neck fracture and a greater trochanter fracture or metaphyseal fracture, a bone plate and multiple screws are used to secure the bones in place. If a femoral neck fracture cannot be repaired, total hip replacement may be an option.



In small dogs and cats, a simple procedure called a femoral head and neck excision is a very acceptable treatment and provides an acceptable outcome in most patients. This involves removing the broken fragment and the neck of the femur bone in order that a false joint will form (see figure right).



## Home care

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. It's also extremely important to limit your dog's activity and exercise level during this post-operative period. A sling will be placed on your companion's hind limb to prevent weight-bearing during the first 10-14 days after surgery. Rehabilitation exercises can be done at your home or if you choose, by professionally trained therapists at an animal rehabilitation center. Rehabilitation therapy should be continued until your dog is bearing weight well on the operated limb (typically 2 - 4 weeks after surgery). Detailed instructions will be given to you after the surgery. The surgeon will monitor the healing process with two follow-up exams. The first is scheduled at two weeks after the surgery and the second is at eight weeks after the surgery. By 8 to 10 weeks after surgery, most dogs are fully weight-bearing on the operated limb, although exercise should be limited during the first three months after the procedure.

## Results

Surgery usually gives an acceptable outcome; however, it is possible that the dog may not be a good athlete (such as a hunting dog). Dogs that are 4 months and younger tend to develop much more arthritis than older puppies with the same fracture. Uncommon complications include infection, breakage of the pins, and sciatic nerve damage. In general, most small dogs and cats that receive a femoral head and neck excision surgery regain very good function of the limb.

## Assessment and recommendations

Patient: \_\_\_\_\_ Date: \_\_\_\_\_

### Treatment

- Surgery is recommended
- Surgery is not needed – continue cage rest for \_\_\_\_\_ weeks

### The following has been prescribed

- No medications or special diet are necessary at this time
- Pain controlling medication: \_\_\_\_\_
- Nonsteroidal anti-inflammatory medication: \_\_\_\_\_

### Exercise

Confine your pet to the house other than very short leash walks necessary for bowel movements and urination.

### Preparation for surgery

- Start fasting your companion at midnight before the surgery; water should not be withheld
- Pepcid AC 10 mg tablets: give \_\_\_\_\_ tablet(s) with water (use a syringe if needed) at 6 AM on the day of surgery