

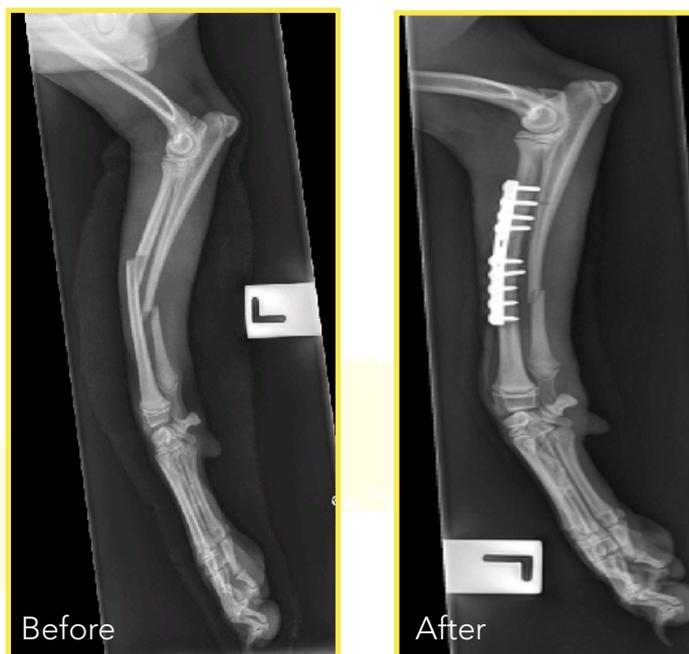
## BONE FRACTURES

A fracture is defined as a breakage of any bone in the body. When a fracture occurs, the damage to the body is not only limited to the bone but to the surrounding tissues. These surrounding tissues may include skin, muscle, tendon, ligament and nerves.

There are important considerations which will affect recovery from fractures.

The three main considerations are

- the cause of the fracture
- the location of the fracture and
- whether the fracture is associated with other injuries.



Radiographs (X-Rays) of a patient at BVSC.

Accidents are by far the most common cause of fractures. Accident induced fractures are caused by a large external force e.g. being hit by a car or falling from a height. Large external force fractures are always accompanied by significant soft tissue damage. Pathological fracture is the term used to describe a fracture which occurs in bone that is weakened by disease e.g. cancer or infection. Large external forces are not usually involved in causing pathological fractures and they occur during routine activity.

The majority fractures are more effectively treated with surgery. However, there are certain location and types of fracture that can be treated with conservative management (splint or cast application and cage rest). Examples of these locations include fractures of bones that are well supported by surrounding tissue e.g. pelvis, toes and ribs. Certain fractures will require evaluation for surgery as a priority e.g. fractures that involve the spine, the joints or that are open to the air.

Animals with fractures caused by motor vehicles or falling from a height often have multiple other injuries. Concurrent chest and abdominal injuries may be life threatening. Hence, assessing and stabilising these injuries must take a priority first.

### Treatment Options For Fractures

Natural bone healing may take from four to twelve weeks to occur depending on the type and location of the fracture, and the age of the animal. The aim of bone repair is to maintain the bone fragments in normal, stable alignment until the natural process of healing has occurred. Stability (whether with a cast or implant placement) is very important for successful bone healing.

There are a variety of implants that can be used to fix a fracture. They can be internal (bone pins, plates, screws) or external frames with pins. Selection of the most appropriate internal fixation device by the surgeon is based on patient size and the particular type of fracture being treated. The use of casts and splints applied without surgery is called external coaptation. In some cases both internal fixation and external coaptation are used together to provide maximum stability. Surgical implants may or may not require removal after bone healing. This decision is based on the type of implant used, the progression of the healing and the age of the patient. Implant removal is performed as a separate operation.

All injured animals must remain in hospital until they are comfortable and able to walk. The duration varies (this can be from two to ten days) depending on the severity of injury. You are encouraged to visit your pet in hospital and participate in the recovery process.

Traumatic bone fractures are serious injuries. Fracture repair is a complex and often lengthy surgical procedure. While complications from injury during diagnosis or surgery are uncommon, they can and do happen and may alter chances of recovery. Such complications include movement or loosening of the bone or implants, and infection. On occasion these complications may require re-operation.

### **Post-operative care**

Strict confinement and supervised activity is required at home after surgery. Activity restriction is essential until fracture healing is adequate to avoid complications. Adequate fracture healing usually occurs at about eight to ten weeks post injury and is confirmed by radiographs (X-rays).

Medication is required for pain control and control of infection during the early part of the post-op period. The frequency of post-operative rechecks determined on an individual basis. Typically they occur at two weeks postoperatively for suture removal, and at eight weeks for radiographs.

Early controlled activity and professional physiotherapy is strongly recommended to help maximise recovery and return to normal function. This typically requires weekly visits until healing is confirmed. You can learn more the animal physiotherapy service provided by BVSC by visiting the service page listed on the left hand side of our webpage.

Most animals with fractures heal well after treatment without residual dysfunction. However, when complicated fractures occur with joint, nerve and/or spinal injury, there may be residual dysfunction after treatment.

### **Financing Surgical Treatment For Your Pet**

BVSC understands that surgical treatments are both unexpected and costly. We can assist your access to third party external finance companies working with us to help spread your payments. To make an appointment for your pet ask your veterinarian for a referral and contact our friendly reception staff on **(07) 3264 9400**.