Fracture repair

Internal fixation with plates, screws or other implants | Dogs and cats

A broken bone needs a stable environment to heal. Internal fixation uses implants beneath the skin to keep bone fragments in a suitable position.

About the procedure

What type of fracture does my pet have?

A fracture may be a simple break or consist of many fragments. It may enter a joint or involve a growth plate in a young animal. A closed fracture has intact skin over it; an open fracture communicates with a wound and has a greater infection risk. Trauma can also injure nerves, blood vessels, the chest or abdomen. Stabilising your pet's general condition may be more urgent than repairing the bone.

How is the repair planned?

X-rays, sometimes including the joints above and below the fracture, help assess the break. CT may be useful for complex joint, spinal or pelvic injuries. The surgeon considers blood supply, the shape and number of fragments, size and age of the pet, and how the limb will be used. Open wounds may need cleaning and temporary stabilisation before definitive repair.

What does internal fixation mean?

A plate and screws can hold the main bone fragments in alignment. Screws alone, pins, wires or other implants may be used or combined when suitable. Some fractures are repaired by directly aligning the fragments. Others are treated by bridging the break, keeping the surrounding tissues and blood supply as intact as possible so the body can build new bone. X-rays confirm alignment and implant position.

Are there alternatives?

Selected stable fractures can be managed with a splint or cast. An external frame, a different internal implant or occasionally amputation may be more appropriate for very complex or severely damaged limbs. Treatment decisions depend on the individual fracture, expected function and practical care needs. A cast is not necessarily the easiest or lowest-risk option.

Fracture repair

Recovery, risks and home care

Recovery and home care

Expected outcome

The aim is to restore useful limb function and comfortable alignment. Injury to a joint or growth plate may lead to arthritis or altered growth.

Caring for a repaired fracture

Keep your pet confined. Cage rest is strongly recommended and will help avoid many unnecessary complications. Use controlled toilet trips for dogs; keep cats indoors in a safe room or pen. Give prescribed medicines and check the incision every day. If a bandage is used, keep it dry and monitor exposed toes for swelling, coldness or discomfort. Do not alter the bandage yourself.

How long will healing take?

A wound check is commonly performed in 10–14 days. Repeat X-rays are often taken at around 4–8 weeks, depending on age and the fracture type. Young animals may heal quicker, while complex or infected fractures can take several months. Apparent comfort is not proof of healing. Increase activity only when the vet confirms sufficient strength and gives a plan.

When should I call?

Sudden pain, a new bend in the limb, inability to bear weight, an opening wound, persistent discharge or an abnormal bandage requires prompt veterinary assessment. A new accident during recovery can damage even a well-positioned implant.

Questions to ask your vet

How stable is the repair? Does the fracture involve a joint or growth plate? When are repeat X-rays needed?

Discussing risks and complications

As with any surgical procedure, complications can occur. Your surgeon will discuss the possible complications, individual risks and expected outcome for your pet during the pre-operative consultation.

General anaesthesia can cause serious complications, including death. Your veterinary team will explain individual risks and alternatives.

Your veterinary team will discuss the recommended treatment, alternatives and the risks of general anaesthesia for your individual pet.

Important information

Check the wound daily; prevent licking and keep it dry. Give prescribed medicines only. Report vomiting, diarrhoea, poor appetite or increasing illness. For breathing difficulty, collapse, uncontrolled bleeding or severe distress, seek emergency care immediately.

Follow the personalised discharge plan; this sheet is not a consent form. Contact your own practice or its out-of-hours service for urgent care.