

## Arthrodesis

### The basics

Arthrodesis means fusion of the joint. This is a salvage procedure which is used in several cases such as chronic arthritis, fractures that affect the joint and cannot be repaired, severe luxations of the joint etc. Being a salvage procedure, the purpose is to provide a functional leg without a painful joint. However, following this procedure, the joint will not be mobile anymore, and your pet will walk with a 'straight' foot or leg i.e. unable to flex or extend.

### The procedure

A joint is made out of at least two bones. The cartilage of the joint is one of the reason the bones of the joint don't fuse. During the arthrodesis procedure, the cartilage of the joint is removed and the bone underneath exposed to the joint space. By doing so, the body is 'tricked' and thinks that the joint is actually a 'fracture'. Naturally, the body will try to 'fix' the fracture and heal it. Obviously, like with any fracture, we need to help it heal by using plates, screws, pins, wires etc.

### The aftercare

From the body's perspective, an arthrodesis is a 'abnormality'. Therefore, the postoperative care is even more important than for other surgeries.

### The first 2 weeks

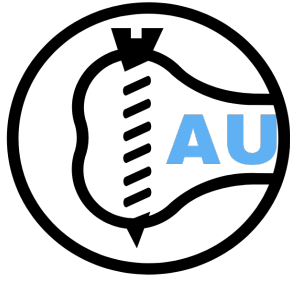
Sutures are usually resorbable, under the skin and there is no need to be removed.

Check ups with your vet/nurse are recommended at day 3 and day 10 postoperative.

Limping is to be expected, most of the times worse than before the surgery. This is due to surgical trauma. However, weight bearing should be noted from day 3 to 5 postoperative. If this does not happen, please contact your vet.

Swelling of the region is also expected, again due to surgical trauma.





The incision should be clean and dry. If the wound opens up or if there is discharge, please see your vet.

Medication – pain killers are prescribed for 7-14 days, on a case by case basis.

Antibiotics – we are all aware of antibiotic resistance and the damage that misuse of antibiotics has done to our life. We usually don't prescribe antibiotics unless absolutely necessary.

Physiotherapy – please see our dedicated section on the website

For cats, the same principles apply.

\*\*\* From week 2-3 postoperative, the incision should be clean, dry, with a normal colour of the skin and not red, puffy or open. Please contact your vet if this is not the case

## Week 2 to week 6 postoperative

Gradual improvement of the lameness should be noted. Although your pet may behave like nothing has happened, it is **IMPERATIVE** to continue the restricted exercise.

Once the incision has healed, hydrotherapy can be started and we do encourage it – please see our dedicated section on the website.

Physiotherapy – please see our dedicated section on the website

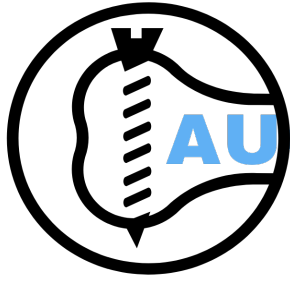
Follow up xrays are recommended at 4-6 weeks postoperative; these are performed to assess the metal implants and healing of the bones. In the rare case where complications occur, follow up xrays would allow us to act quickly, before the situation turns disastrous.

For cats, room bound restrictions apply for this time interval. The rest of the principles still apply, including hydrotherapy, if possible.

## Week 6 to 12 postoperative

By now, your pet should be walking well on the affected leg, sometime with a slight limp due to the rigidity of the joint. Most of the times, this is normal.

Providing all is well and recovery is within normal time frame, you should be allowed to walk your dog on a long lead and even gentle trots are allowed. The sofa and stairs restrictions are now lifted (see below). However, your dog should not be allowed to run (although if this happens is not the end of the world but do stop it as soon as you can), chase balls, toys, play with other dogs etc.



For cats, the full roam of the house should be allowed, however, the kitchen is still a forbidden space because of the countertops – these high surfaces are too risky for a cat to jump on at this stage.

A follow up check which should be the sign off consult should be booked at your vet around week 12 postoperative.

\*\*\*In some situations, the body heals slower than expected; this is also true in some breeds and with some joints. If the follow up xrays reveal signs of slow healing, it would be wise and safe to repeat the xrays 12 weeks postoperative. If the joint has fused, great, your pet should signed off. However, if the joint has not fused 12 weeks postoperative, the exercise restrictions remain in place. These situations are rare but they do need further attention and a personalised plan will be designed for your pet.

## The exercise

The first 12 weeks postoperative, your pet should be walked on a lead.

He/she should not be allowed to jump/run, go on sofa, go upstairs etc. Cage rest is rarely recommended and, in our opinion, detrimental to your pet's mental health and recovery. In the rare occasion where dogs are too boisterous, cage rest may be adequate.

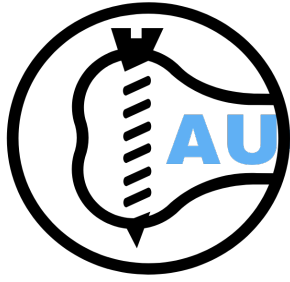
Walking regime should be started as soon as possible i.e. from day 1-2 postoperative. Dogs thrive on exercise and early ambulation will stimulate the blood flow and mental status which is beneficial for your pet.

We tend to recommend 10 minutes per walk, two to four times a day. Every week 5 minutes should be added to the walk i.e. 15 minutes per walk on week 2, 20 minutes per walk on week 3 etc.

For cats, we recommend to confine him/her to a room. If this is not a possibility, a large pen/large dog cage would suffice. The inside of the pen/cage can be boarded with cardboard to prevent him/her from trapping their legs in the bars. Room confinement is mandatory for the first 6 weeks, after which they should be allowed to have the roam of the house except the kitchen.

## What to expect

As previously explained, an arthrodesis is a salvage procedure and the goal is a happy life, without a painful joint, not necessary without a limp. Depending on the affected joint, limping may be more or less noticeable. As a rule, the higher the joint is, the more visible the limping is. For example, a fused hock rarely causes limping however a fused shoulder will always create an award gait. We call this mechanical lameness which means the limp is because of inability to flex the joint, not pain



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Complications of this type of surgery include slow healing, lack of healing, implant failure, infection etc. Most common one is infection. Most of these complications can be managed with/without surgery. Obviously, should complication occur, a personalised plan of action will be created for your pet.

