# Patella Luxation Surgery: Pre-operative Information

## What is patella luxation?

In a normal joint the patella (knee cap) sits in a groove in the femur called the trochlea, tracking up and down this groove as the stifle (knee) is flexed and extended. In some dogs the alignment of the hip, stifle and thigh musculature mean that the patella moves out of this groove and this is called patella luxation. Clinical signs can vary from occasional skipping to persistent lameness and the development of arthritis.

Healthy knee Luxated patella

# How is patella luxation diagnosed?

Diagnosis is typically made by feeling the patella 'pop' out of the groove on examination. Radiographs are taken to confirm the condition and to check for any signs of other problems (for example cruciate ligament rupture).

#### What surgery is performed to treat patella luxation?

During surgery the inside of the stifle joint is examined to check the depth of the trochlea and the condition of the

articular cartilage and cranial cruciate ligament. Next either one or both of the following procedures will be performed, based on the appearance of the joint.



## **Trochleoplasty**

In some cases the groove in which the patella sits is abnormally shallow. During this procedure a wedge or block of cartilge is lifted and some bone underneath is removed before replacing the cartilage. In this way the trochlea is deepend to help the patella stay within the groove as the stifle moves.

slipped out of

#### **Tibial Crest Transposition (TCT)**

This procedure is performed to correct the malalignment of the thigh musculature. The portion of bone to which the patella tendon attaches is cut and moved sideways then secured in position using pins and wire.

## What happens after surgery?

Following surgery your dog will need to be strictly rested for 6 weeks, with only short trips on the lead to the toilet. They must not climb stairs, run or jump as the bone needs time to heal. They will need to wear a buster collar to prevent them licking the surgical wound until the skin has healed (usually around 2 weeks).

After 2 weeks you can start some passive range of motion and physiotherapy exercises – we recommend visiting a qualified physio/hydrotherapist from this point but will also demonstrate some exercises for you to perform at home.

After 6 weeks we will take follow-up x-rays under sedation to check healing is occuring as expected. Following this you will be asked to gradually increase exercise levels; initially 5-10 minutes on the lead two or three times daily, adding 5-10 minutes each week. Once 30 minute walks are easily managed offlead exercise can be resumed, starting with 5 minutes and slowly increasing in duration.

#### What are the possible complications?

As with any surgery complications can occur. The most common complications encountered with this type of procedure are infection, continued patella luxation and irritation of the soft tissues overlying the implants. If the latter occurs a short procedure may be performed to remove the implants.