

# LUXATING PATELLA

### **ABOUT THE DISEASE**

A **luxating patella** is also known as a dislocated kneecap. It is a condition in which bony abnormalities result in the patella sliding off the femur bone while walking or running. Naturally the patella rides between two grooves (trochlea) on the femur bone, but with this boney distortion and constant abnormal wear, the trochlear grooves will wear down, worsening the luxation over time.

The abnormalities of the knee that can cause **luxating patella** include:

- Shallow trochlear groove
- Twisted shin bone resulting in a misaligned tibial crest
- Torn or stretched soft tissues that normally hold the kneecap in place
- Significant bowing or twisting of the femur bone

When the patella luxates towards the inside of the leg, it also causes the shin bone to turn inward, which causes a strain or tear on the cranial cruciate ligament (CrCL) in approximately 20-25% of patients.

Clinical signs of **a luxating patella** include lameness, intermittent skipping gait, crying out, or unwillingness to jump on elevated surfaces.

## **OBTAINING A DIAGNOSIS**

A diagnosis is obtained through physical examination by a veterinarian with a thorough clinical history.

Radiographs (x-rays) may identify twisting of the femur bone or other anatomical abnormalities.

#### TREATMENT

Medical management is similar to the management for osteoarthritis. Please see the <u>Osteoarthritis</u> document for additional information.

The goal of surgical management is to correct the anatomy of the knee so that the kneecap will remain in the trochlear grooves. If the trochlea is shallow, the area is surgically deepened to create a groove that will capture the kneecap. Next, the alignment of the patellar ligament is assessed, and if it is not in line with the trochlear groove the attachment is moved. This is accomplished by cutting the front of the tibia bone, moving the ligament, and securing the bone with pins. The pins are permanently left in place under normal circumstances. As a final step, the stretched soft tissues are trimmed and stitched together to pull the kneecap back into the trochlear groove.

In large-breed patients, a bowed thigh bone, which contributes to **a luxating patella** needs to be corrected. This is done by cutting, straightening, and supporting the bone with a metal plate and screws.

#### **TIPS FOR SUCCESS**

• About 90% of canine patients that undergo this surgery will make a full recovery.