

LUXATING PATELLA

What is a luxating patella?

The patella, or knee cap, should be located in the centre of the knee joint. The term "luxating" means out of place or dislocated. Therefore, a luxating patella is a knee cap that moves out of its normal location.

What causes this to occur?

The muscles of the thigh attach directly or indirectly to the top of the knee cap. There is a ligament, called the patellar ligament, which runs from the bottom of the knee cap to a point on the tibia just below the knee joint. When the thigh muscles contract, the force is transmitted through the patella and through the patellar ligament and results in extension (straightening) of the knee joint. The patella stays in the centre of the leg because the point of attachment of the patellar ligament is on the midline and because the patella slides in a groove on the lower end of the femur (the bone between the knee and the hip).

The patella luxates because the point of attachment of the patellar ligament is not on the midline of the tibia. It is almost always located too far medial (toward the middle of the body). As the thigh muscles contract, force pulls against the groove on the inner side of the femur. After several months or years of this abnormal movement, the inner side of the groove wears down or the ligament stretches and the patella is free to move out of the groove or dislocate. When this occurs, the dog has difficulty bearing weight on the leg. It may learn how to kick the leg and snap the patella back into its normal location. However, because the groove is gone, it dislocates again easily.

Does a luxating patella cause any long-term problems for my dog?

Some dogs can tolerate this problem for many years, some for all of their lives. However, with advancing age, the joint may become arthritic and painful.

Can a luxating patella be corrected?

Surgery should be performed if your dog has a persistent lameness or if other knee injuries occur secondary to the luxation.

Surgical repair is a three step process.

1. The point of attachment of the patellar ligament is moved and

transplanted surgically to its proper location to correct the incorrect alignment.

2. The groove in the femur is deepened so the patella will stay in place.
3. The capsule around the joint is tightened. This last step is important because the joint capsule will have stretched during the period of luxation.

If the surgery is performed before arthritis occurs, the prognosis is excellent. Your dog should regain full use of its leg. However, if arthritis has already occurred, the joint will still be somewhat painful, especially in cold weather.