

Luxating Patella (Dislocated Kneecap)

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

Contributing Factors

The muscles of the thigh attach, directly or indirectly, to the top of the kneecap. There is a ligament, the patellar ligament, running from the bottom of the kneecap 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 to the point on the top of the tibia. This results in extension (straightening) of the knee. The patella stays in the center 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 long bone which fits between the knee and the hip).

Prevalence

Patellar luxation is most common in small toy breeds of dogs.

Causes/Transmission

The patella luxates when 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 midline of the body). As the thigh muscles contract, the force is pulled medial. After several months or years of this abnormal movement, the inner side of the groove in the femur wears down. Once the side of the groove wears down, the patella is then free to dislocate. When this occurs, the dog has difficulty bearing weight on the leg. It may learn to kick the leg and snap the patella back into its normal location. However, because the side of the groove is gone, it dislocates again easily.

Clinical Signs

Some dogs can tolerate this problem for many years, some for all of their lives. However, this weakness in the knee predisposes the knee to other injuries, especially torn cruciate ligaments. Also, arthritic changes may take place in the joint and make it painful.

Diagnosis

Luxating patellae can be detected with a routine orthopedic examination of the knee joint and X-rays.

Therapy

A luxating patella can be repaired surgically by relocating the point of attachment of the patellar ligament and by deepening the groove in the femur. This should be done if your dog has a persistent lameness or if other knee injuries occur secondary to the luxating patella.

Prognosis

Surgical repair is generally very successful. The prognosis is more favorable when the luxation is not severe or if repair occurs before arthritis develops.