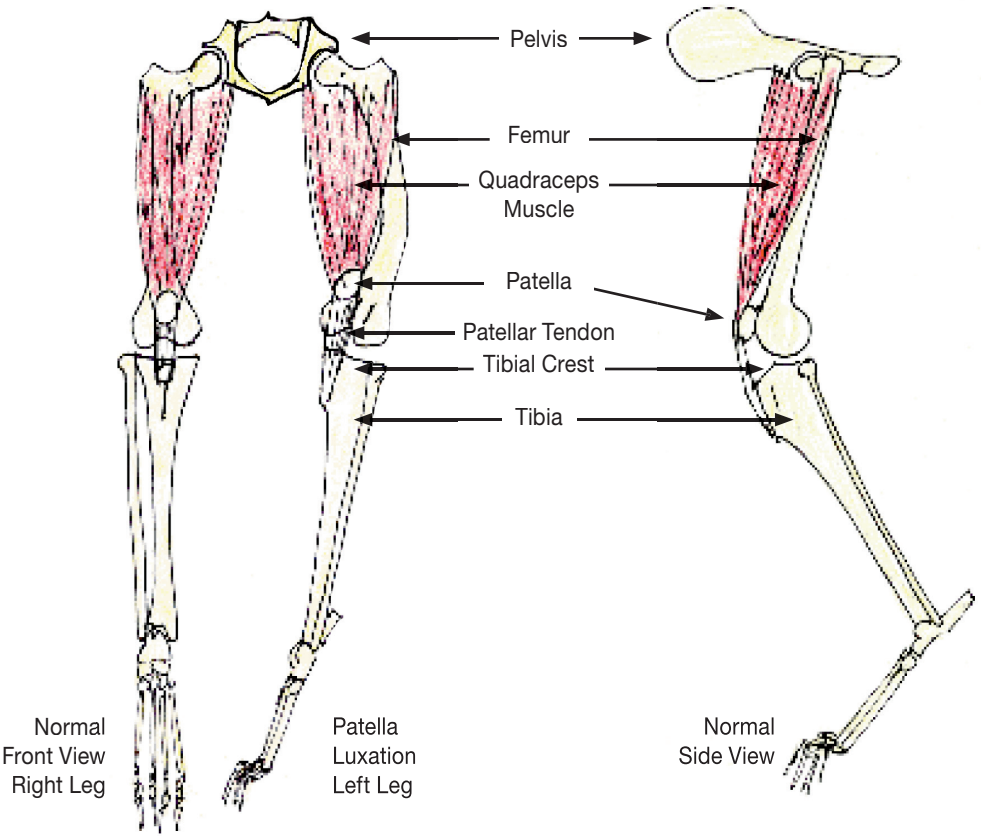
PATELLA LUXATION

Introduction

The stifle (knee) is essentially a hinge joint, allowing the major muscles of the upper leg to cause the normal swinging movement of the lower leg with walking or running. The patella (knee cap) is a small bone in the patellar tendon of the quadriceps muscle that rides in a groove in the femur (upper leg) at the stifle joint, stabilizing the stifle. The patellar tendon attaches to the tibial crest below the stifle. These structure make up the quadriceps mechanism. Occasionally the quadriceps mechanism is not well aligned during development, generally due to bowing of the femurs. The end result is that the bones and stifle joint do not develop properly allowing the patella to luxate or dislocate, flipping in and out of the groove. The result is excessive wear on the cartilage which may lead to osteoarthrosis (degenerative arthritic changes).



Patella Luxation is a Painful Condition!

In addition, since the patella luxation occurs while the animal is growing, it can result in further deformities of the developing femur and tibia. Patella luxations occur most commonly in small breed dogs, although cats and larger dogs can also be affected. In mild cases, the abnormality may have gone unnoticed until the pet is much older. In moderate to severe cases the diagnosis can be made as early as 3 months of age. In these cases, the earlier that corrective surgery can be performed, the less likely future problems will develop or that future surgeries will be necessary.

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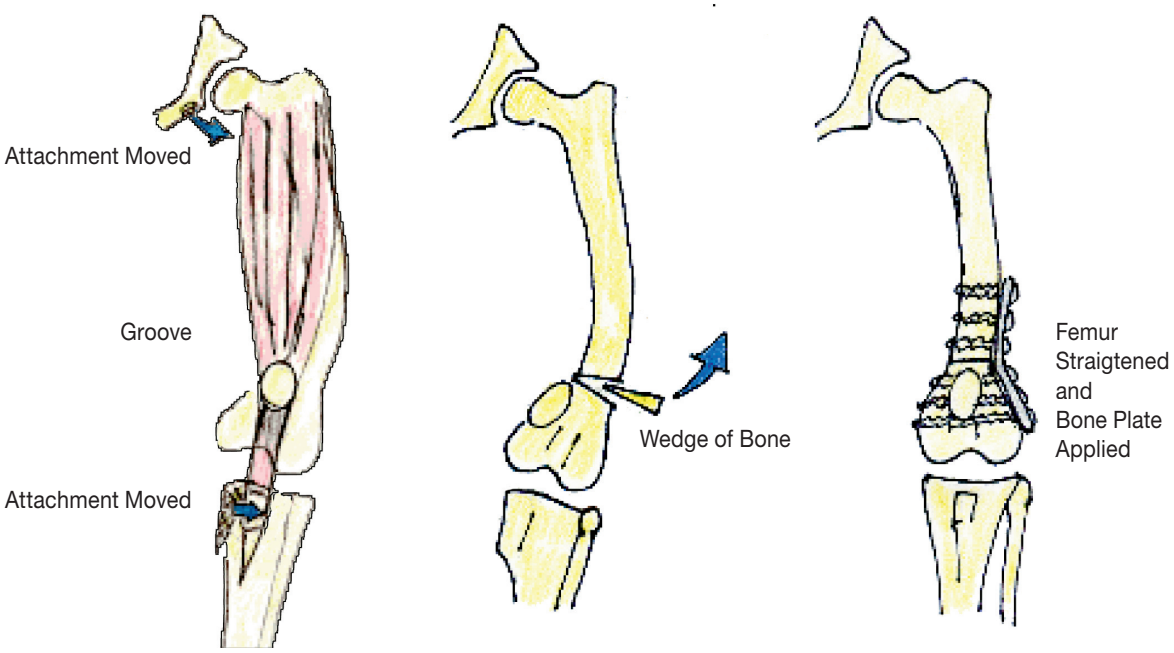
Treatment

The primary goal of surgery is to realign the quadriceps mechanism and thus prevent luxation / dislocation of the patella. Mild to moderate patella luxation (grade II-III), may be surgically treated by deepening the groove that the patella slides in and realignment of the attachment of the quadriceps muscle (the patellar tendon) on the crest of the tibia (lower leg) or the attachment of the quadriceps muscle at the top on the pelvis. Often other procedures to tighten the soft tissue support structures and loosen others are performed in conjunction with these orthopedic procedures. If the condition is severe (grade III-IV) and not treated early enough, in addition to repairing the groove, major corrective osteotomies are usually necessary. Corrective osteotomies involve cutting the femur and/or the tibia and realigning them with pins and clamps (external skeletal fixation device) or bone plates and screws. This is a major surgery and may require multiple surgeries over the course of a few months. Thus, it is very important that surgery be done as soon as possible in those patients that need it.



Post-Operative Home Care

Strict control of activity is required after surgery. No off leash activity, no running, no jumping, no rough housing, no playing can be allowed during the rehabilitation period. Patients must be confined to a crate or pen for 8 weeks or more. Slow leash controlled walks and range-of-motion physical therapy exercises can begin as early as 2 days after surgery. Although fibrosis (scarring) is required for joint stability, early owner-controlled use of the operated leg will improve joint mobility. The development of good muscle tone and strength is critical to the overall recovery. If patients are too active, too soon, they can tear or damage recovering tissues. **It is IMPERATIVE that all activity must be controlled by the owner during the healing period!**

Anti-inflammatory medications and medications to improve the quality of the healing joint cartilage may be started immediately after surgery. VMSG