

# MEDIAL PATELLA LUXATION (MPL)

### ANATOMY:

The patella (kneecap) is a small bone attached to the end of the quadriceps muscle where it becomes the patellar tendon. The patella rides in a U-shaped cartilage groove (trochlea) at the end of the femur. This allows for extension of the stifle and normal weight bearing. In certain dogs, the patella will luxate medially (pop out of place inside towards the groin), creating lameness and difficulty extending the leg. In rare cases, the patella will luxate laterally (to the outside). Dogs with patella luxations often have abnormal anatomy such as shallow trochlear grooves and curvy bones which contribute to the luxation.

## **HOW DOES IT OCCUR:**

In most cases, MPL is a congenital deformity. In rare cases it can be caused by trauma. The grade or severity can worsen over time and lead to problems such as cartilage erosion, arthritis and rupture of the cranial cruciate ligament.

#### **DIAGNOSIS:**

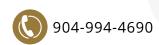
The diagnosis of a MPL is generally made on palpation of the stifle. Radiographs (x-rays) assist in the diagnosis and help plan the best method of treatment. MPL is graded on a severity scale from 1 (least severe) to 4 (most severe).

### TREATMENT:

Surgery is generally recommended for dogs with clinical signs secondary to the MPL (limping or skipping) or with high grade luxations that are likely to cause problems in the future. Most dogs require a combination of four repair methods: medial desmotomy and lateral joint capsule imbrication (soft tissue adjustments on either side of the patella), block or wedge recession trochleoplasty (deepening of the groove while preserving natural cartilage) and tibial tuberosity transposition (realignment of the bony insertion of the patellar tendon). In certain rare circumstances, it may be necessary to cut and realign the distal femur with a bone plate.

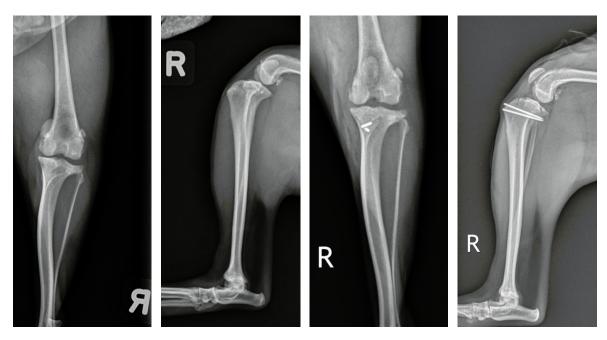
## **COMPLICATIONS:**

Complications are uncommon following MPL surgery and most can be treated easily. Complications can be prevented by following the postoperative instructions given to you by your surgeon. Potential complications following MPL surgery include infection, delayed bone healing, reluxation of the patella or the need to remove implants.





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Radiographs of the stifle of a dog before and after MPL correction

### **HEALING:**

Healing time is approximately 6-8 weeks. The metal implants usually stay in forever, but can be removed once bony healing is complete.

# **POSTOPERATIVE CARE:**

**Questions?** 

During the recovery process it is imperative that your dog's activity be restricted to short leash walks only. Running, jumping or off-leash activity can result in delayed healing or the need for additional surgery. The first two weeks are limited to the time to urinate and defecate only. Weeks 2-6 will allow for short walks of 5-10 minutes. Your dog should be confined to a crate or small room when not directly supervised.

## **FOLLOW-UP:**

Recheck visits are planned two weeks following surgery for removal of skin sutures. Radiographs are taken 6 weeks after surgery to evaluate healing and determine when your pet can resume normal activity.

