

MEDIAL PATELLA LUXATION (MPL)

What is medial patella luxation (MPL)?

Medial patella luxation is a condition in which the patella (knee cap) dislocates medially (to the inside) of the knee. This is a very common condition in dogs; especially in smaller breed dogs.

In the majority of cases, MPL is a developmental condition that worsens during growth. It can also develop at an older age secondary to a cruciate ligament rupture or due to trauma.

Why does MPL matter to my dog?

There are two main ways that MPL causes discomfort in dogs. Firstly, when the patella is sitting outside of its normal position, it will cause acute discomfort and many patients will skip on the leg until the patella returns to its normal position. Secondly, over time as the patella continues to move in and out of normal position it will cause rubbing on the cartilage of the joint. This results in arthritis and discomfort for older animals.

What can we do about MPL?

The main goal of surgery for MPL is to correct the problems that have led to the luxation. Most commonly this involves three procedures:

- A sulcoplasty - This deepens the groove of the knee so it is harder for the knee cap to dislocate.
- A tibial crest transposition - moving the attachment of the patella ligament such that it sits in a more adequate position.
- Imbrication - tightening of the joint capsule.

What are the risks of surgery?

There are risks associated with all procedures that are performed in veterinary surgery. It is important to understand the risks associated with the procedure being performed and what that may lead to.

Minor Complications:

These are issues that can be seen more frequently but are generally very readily dealt with. The common complications seen include:

- Superficial infections of the skin - this will be seen as discharge or oozing from the surgery site.
- Swelling
- Pain
- Wound breakdown

If any of these are seen in the post-operative period then it is important to discuss this with your veterinarian. The vast majority of these complications if caught early can be readily managed.

An elizabethan collar is recommended after surgery to reduce the chance of licking or biting which may introduce infection or cause the wound to open up.

Major Complications:

Complications are considered major if they require the patient to undergo further surgery or intensive medical treatment. Major complications are reported in approximately 5% of cases:

- Deep Surgical Infection - Infection is a risk with any procedure but with orthopaedic surgery there is a bigger risk that infection may "stick" to the pins and wire used. It is uncommon for implant removal after MPL surgery but in rare cases of severe infection may be necessary.
- Pin/Wire breakage - This complication is generally a result of animals being over active during the recovery period. It is vital the patients are adequately rested and undergo a strict exercise program to ensure this risk is mitigated. If pins or wire break after surgery then the patient will essentially have a fracture or broken bone. This will necessitate a second procedure to replace and repair the broken implants.
- Implant Irritation - The pins and wire used in MPL surgery are very closely associated to the large patella ligament of the knee. It is possible that these pins and wire may cause rubbing against the ligament which may cause ongoing pain. If this is seen, these pins and wire may need to be removed once the bone has healed to prevent ongoing irritation.

What to expect after surgery:

Structured rest and rehabilitation are vital to a successful MPL procedure. The implants used are strong and stable however are not impossible to break. Patients generally require at least 6-8 weeks of strict rest prior to more intense exercise. It is recommended that patients undergo an x-ray at this stage to ensure the bone has healed prior to returning to normal unrestricted activity.

Once healed, it is expected that use of the leg is close to normal. Depending on the severity and cause of the initial luxation, arthritis may be an issue within the joint that requires ongoing management. Arthritis management should be discussed with your regular veterinarian.