

## Luxating Patella

The patella (kneecap) is a small bone buried in the quadriceps tendon. It sits in a femoral groove called the trochlea groove and forms part of the extensor mechanism, giving stability to walking and standing. Patella luxation occurs when the kneecap rides outside the femoral groove. This dislocation may be towards the middle (medial luxation) or the outside (lateral luxation).

Luxating patellas are diagnosed in around 7% of small breed dogs. It is a consequence of multiple skeletal abnormalities affecting the alignment of the limb. The patella may luxate because of any combination of the following:

- Abnormal hip anatomy
- Changes in the femur angle or shape
- Malformations of the tibia
- Deviation of the tibial crest
- Shallow trochlea groove
- Quadriceps muscle weakness
- Patella ligament being too long or on the incorrect angle

Not all dogs with patella luxation will develop pain or lameness from their patella dislocating.

To help determine whether medical management, or surgery is appropriate your pet may be given a "grade".

**Grade 1** - The patella wobbles in the groove and can be lifted out but flicks back in by itself

**Grade 2** - When the patella is pushed out by activity (or the vet) it stays out, until clicked back in (some dogs learn how to do this for themselves)

**Grade 3** - The patella is luxated most of the time but can be positioned back the groove by the vet

**Grade 4** - The patella is always luxated, it cannot be put back in the trochlea groove.

As a general rule, grade 1-2 are candidates for medical management but dogs with grade 3-4 patella luxation require surgery and possible referral to a specialist.

Medical management involves strict weight control, a diet high in omega-3 & 6, glucosamine and chondroitin, and exercise programs to maintain strong leg muscles.

Surgery for patella luxation involves altering the joint capsule, deepening the trochlea groove, and sometimes relocating the patella tendon.