

What is a tibial plateau leveling osteotomy?

A tibial plateau leveling osteotomy (TPLO) is a method of repairing a cranial cruciate ligament (CCL) rupture in a dog. A CCL tear in the dog is similar to an ACL tear in humans. It can be an abrupt tear during trauma or strenuous activity, as often occurs in people. However, it can also be a slow deterioration of the ligament over weeks or months, potentially affecting both stifles (knees). Following a CCL tear, the limp is usually quite severe. While some improvement may occur with time, surgery is the best method of treatment for a dog with a CCL tear.

Over the past 30 years, numerous surgical techniques have been developed, of which the TPLO remains a very popular choice. The TPLO is usually the best option for large-breed dogs but is also a good option for moderate and small breeds, especially if a full return to an active lifestyle is desired. For the TPLO surgery, the angle of the tibia (the bone below the stifle) is changed so the ligament is no longer needed, unlike the human procedure where the ligament is repaired.

What is the post-operative care?

Strict rest is required following surgery to allow for proper healing of the tibia and the surrounding soft tissues. Initially, there should be no running, jumping, or playing. After the first month of strict rest, controlled activity may be gradually introduced for three months following surgery. Physical therapy is suggested to improve the speed of healing. In the weeks following surgery, X-Rays are taken to assess healing of the tibia.

What are the risks or complications?

Most complications following tibial plateau leveling osteotomy are minor in nature. With some minor complications, additional medications or other forms of physical therapy may be required. Major complications, those requiring additional surgery, are not very common. As long as the activity restrictions are adhered to, it is not likely that additional surgery will be needed.

Can the leg be re-injured following surgery?

After the healing is complete, it is rare for problems to develop. In fact, tibial plateau leveling osteotomy is occasionally performed when other methods of repair have failed to return dogs to good use of their leg(s).