

MEDIAL PATELLAR LIGAMENT DESMOTOMY PRE-OPERATIVE

CONSIDERATIONS

- WHO, WHY & WHEN?

The medial patellar ligament is one of the key structures (along with the patella and middle patellar ligament) that is required to lock the patella (kneecap) on the end the femur. Proximal patellar hesitation (PPH) and intermittent upward patellar fixation (IUPF) constitute the horse's inability to timely disengage the patella from the medial femoral trochlea.

In cases of PPH and IUPF, surgical resection of the medial patellar ligament can result in complete resolution of the problem. Once the medial patellar ligament is resected, patellar hesitation/ fixation is no longer possible and the clinical signs associated with these conditions disappear. Consequently, this strategy has been considered a "cure" by some professionals and is often recommended as a first-line means to treat extracapsular stifle interference in the horse.

It is extremely important to note, however, that the medial patellar ligament also performs another function: stabilization of the patella within the trochlear groove of the femur.

Without tension from the medial patellar ligament, the patella becomes unstable within the femoropatellar joint. Femoropatellar synovitis and frequently osteoarthritis result. Osseous fragmentation along the distal margin of the patella (at the origin of the middle patellar ligament) is another common sequelae to MPD.

Since the stifle is high-motion in nature, chronic inflammation within any of its joint pouches poses a significant concern in regard to future performance soundness.

Persistent femoropatellar joint inflammation typically needs to be addressed on a continual basis and often requires considerable maintenance therapy.

- **PROS:**

- 1) This procedure effectively eliminates biomechanical interference associated with the stifle.

- 2) Arthritis will result from the surgery, but probably won't "catch up" in horses that are 20+ years old.

- 3) Arthritis will result from the surgery, but many not significantly affect horses already exhibiting clinical evidence of stifle arthritis.

- **CONS:**

- 1) Cutting the ligament will destabilize the stifle joint (specifically the femoropatellar pouch) as described above. This will result in arthritis and pain within the joint. More aggressive arthrotherapy (both systemic and local) may be necessary to maintain performance soundness.

- 2) There is no guarantee that the procedure will resolve the horse's lameness. In many cases, stifle interference is only one part of the overall problem.

- 3) Post-operatively, the horse will require 45-60 days OFF (i.e. out of work) in order to adapt to the "new" stifle function. Training or showing is prohibited during this period.

- 4) Fragmentation of the distal (bottom) aspect of the patella (kneecap) is a common consequence of performing this procedure. This would show up radiographically in the event that the horse is resold in the future.

5) Expense. The procedure costs about \$750 US to do on both stiles.