ACL REPAIR CHOICES

There are several different surgeries that can be done to repair a torn anterior cruciate ligament. No one technique has proved superior over time. All have advantages and disadvantage and the prices vary widely, so it can be difficult for a pet owner to decide which one to choose. Here are your options:

Extra-capsular repair

Description: This is the procedure that veterinarians have been doing for 50 years, wherein heavy suture material or wire is used to fashion an artificial replacement of the torn ligament. Over the next several months, scar tissue forms along the suture to reinforce the repair. Eventually, the suture or wire will break but, if all has healed well, the scar tissue provides lasting stability. While it can be done in any size dog, it is most suitable for smaller, older, or less active dogs.

Price: $1500-1800 here, $1800-2700 at Lakeshore Veterinary Specialists. To do both knees at the same time add about $1000.

Advantages: This technique is the simplest to perform, has the fewest complications and is the least expensive option. Expect to spend $1500-1800, depending on the size of the dog and whether there is torn cartilage to repair as well as the torn ligament. This procedure is done by a lot of general practitioners but the chance of complications is reduced if the surgery is done by a specialist, so our price includes the surgery being done by a board-certified surgeon who comes to our practice. That way you have an expert surgeon while still being able to come to your regular veterinary hospital for the procedure and the rechecks.

Disadvantages: This procedure is not a very strong repair. If the dog is too active during the initial healing, he or she can stretch the implant before sufficient scar tissue has formed, requiring a second surgery (and additional expense) to repair. For this reason, this is not the best technique for very large or active dogs. On rare occasion, a dog's immune system will react to the suture material and it will need to be removed. Arthritis in the stifle joint can continue to worsen even after the knee is surgically stabilized.

Recovery: Slow initially. It usually takes most dogs 1-2 weeks after surgery to begin weight bearing and full recovery takes several months. Rehabilitation and underwater treadmill therapy are strongly recommended beginning a month or so after surgery. This would add $400-800 to the overall cost.

Tightrope procedure

Description: A new type of material called fiberwire can now be used in place of the fishing line or wire types of sutures used for extracapsular repair in the past. Fiberwire is stronger and more elastic so it's harder to break. The fiberwire can be used as a standard extracapsular repair, which is what our in-house surgeon does. Or it can be placed in a different pattern using bone anchors, which may give extra stability, which is what the surgeons do at Lakeshore Veterinary Specialists. The fiberwire costs several hundred dollars in and of itself, so it increases the cost of the procedure by about $300.

Price: $1800-2200 here, $3000-3600 at Lakeshore Veterinary Specialists

Advantages: Theoretically, fiberwire repairs provide better stability than the original extracapsular repair but at less expense than the tibial plateau leveling techniques. And, because they are less dependent on early scar tissue formation for stability, they may hold up better for dogs that are slow to heal (such as those with Cushing's disease or hypothyroidism), This is a relatively new material, however, and long term results are not yet known.

Disadvantages: The fiberwire is a braided material, so the incidence of suture reaction and infection is significantly greater than with the standard technique. It is still possible for dogs to break the repair before it's fully healed, so this isn't the best option for a large, active dog. And, as with the extracapsular method, arthritis may still develop despite surgical repair.

Recovery: Slow as for extracapsular repair, rehabilitation recommended as for extracapsular repair.

TPLO & TTA (tibial plateau leveling methods)

Description: Both the TPLO and TTA surgeries involve cutting a piece of bone from the tibia, the shin bone, re-aligning it and then reattaching the piece at a different angle using a bone plate. Instead of artificially replacing the torn ACL ligament these surgeries instead realign the joint to make the ligament unnecessary.

Price: TTA surgery done here at Best Friends by our surgeon is $2500-3000. TPLO done by the surgeons at Lakeshore is $2800-3200 for small dogs, all the way up to $3400-3800 for large dogs. To do TPLO on both knees at the same time is about $5000. It's less expensive to do the TTA here but it usually is a month before we can get on Dr. Laing's schedule. Lakeshore can get you in for a TPLO usually within a week.

Advantages: These are very strong repairs and allow dogs to weight bear much sooner than with the extracapsular or tightrope procedures. Dogs are usually toe-touching the next day and can start rehab in about two weeks. Even though they start walking on the leg quickly, their activity must be restricted until the bone has healed -- which takes about 8 weeks on average. There is much less pain and weakness following surgery than with the extracapsular repair. And, over time these dogs develop much less arthritis than with the other techniques.

Disadvantages: The primary disadvantage is the cost. Not only is surgery more expensive but follow-up x-rays afterwards add another $150-200. If complications develop, they can be more time consuming and expensive to resolve. These may include postoperative infection, implant failure (if the dog is too active before the bone has healed it can break the plate), and implant loosening requiring plate or screw removal.

Recovery: Rehabilitation can begin sooner with TTA and TPLO and is not as extensive, nor is it needed for as long a time as with the extracapsular or tightrope procedures.

Whichever procedure you choose, keep in mind that if one ACL ligament has torn there's a pretty good chance the one on the other hind leg will tear eventually as well, if it hasn't already. Unfortunately, you may be forced to make this decision twice, and incur the expense twice as well. ☹