

## RESTORED RUNNING FOR ROVER!

TPLO surgery is not available everywhere, but as ongoing studies of its results cast positive results on the procedure, more veterinarians are electing to perform it. Dr. Tony Kremer, a specialist in TPLO, perform hundreds of TPLOs each year. "The procedure has worked wonders, restoring them to the active life their owners feared might be a thing of the past," says Kremer.

For the first few days after her surgery, Smith sling-walked Max when she needed to go outside—looping the sling under her belly and using it to lift her hind legs so she didn't bear weight on her newly repaired knee. The family put up gates in the house to keep her from tile and other slippery floors, where she might lose balance and twist the knee before it healed. "For the first week after surgery, she was already using the leg but still limping," says Smith, "and she was on Rimadyl for pain." Then, from about eight weeks through three months, with her family cautiously increasing her activity level as she recouped, she gradually bounced back. A year later, her repaired knee remains in great shape. The ACL in her other knee, however, has now ruptured, and Max's family is preparing for another TPLO surgery and its resulting few months of recovery.

It's not uncommon for both hind knees to be affected. Some, such as Max's, give out at different times; but often the ACLs in both hind legs give out almost simultaneously, forcing owners to decide whether to repair one knee at a time or both at once.

ACLs are the bad boys of the knee world: in people and dogs alike, they are the source of great pain once they rupture, which happens frequently. But, for the most part, the comparison stops there. Canine knees and human knees are built somewhat differently, and to understand why an ACL injury can be so debilitating to dogs, you have to understand a little canine anatomy. The knee joint connects three bones: the femur, which extends from the hip to the knee; the tibia, which extends from the knee to the ankle; and the patella, also known as the kneecap. A mass of tough fibrous tissues that we call ligaments joins these bones together, and among them are two that crisscross

each other. One connects the femur to the tibia in the front of the knee; this is the ACL. The other, the posterior cruciate ligament, connects these two bones in the back of the knee. Both have one main job—to prevent the femur and tibia from sliding back and forth across each other.

With Max's ACL torn, her thigh bone and shin bone were slipping back and forth, literally wobbling as she walked. For dogs suffering this malady, Kremer says "veterinarians generally agree that there is but one resolution—surgery—and that it should be undertaken as soon as possible." Surgical techniques abound. Most of them attempt to repair or replace the ligament itself, using tissue grafts or synthetic ligaments to reconnect the bones. But one relatively new procedure tackles the problem in an entirely different way: cutting into the slanted tibia, leveling it, and altering the joint mechanics; the two bones will no longer slip apart during weight-bearing activity. Called tibial plateau leveling osteotomy (TPLO), the procedure is gaining ground as the surgery of choice for dogs more than 40 pounds. Because the surgery cuts into bone as well as tissue, however, it is more complex, requires a longer recovery time with more and increased owner participation.

Kremer discussed both types of surgery with Smith, and after reviewing his options, Smith elected the TPLO. "A lot of large dogs with just the ligament surgery come back in a couple of years with the same problem," notes Smith, who wanted the situation rectified as completely as possible. Dr. Kremer seconded the choice. "For dogs over 50 or 60 pounds, you have a much better chance of predicting outcome if you use this surgery," he explains.

Max was a great candidate for surgery. Says Smith, "For the first three weeks after the surgery, we sling-walked him to go outside and up any steps. About four months later, she was doing all of her normal stuff," reports Smith. "And more than a year later, she's still fine."