

Pain Management During Surgery

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Bailey, an eight-year-old Lab, had knee surgery today. Obviously, medical procedures like this could potentially be accompanied by pain, but you might be surprised by all of the techniques veterinarians utilize to keep dogs like Bailey comfortable. See if you can count the ways as I recount his story!

Pain relief before surgery

During the initial consultation, Bailey's veterinarian prescribed two pain medications to help out until the day of surgery. One drug was a non-steroidal, anti-inflammatory medication (NSAID), which fights pain indirectly by reducing irritation. The other drug was tramadol, which is strictly a pain killer and in the same family as morphine.

Pain relief on the morning of surgery

On the day of surgery, Bailey was dropped off at the clinic in the morning. An IV catheter was placed in his leg. He received three different injectable pain medications through the catheter. Then he was hooked up to an IV bag that contained the same three pain medications. This is called a constant rate infusion (CRI). The slow drip of a CRI delivered a steady flow of the three pain medications into Bailey's body. A CRI has 3 important benefits:

- It allows us to use much smaller doses of medications (decreasing potential side effects)
- It prevents the need for multiple injections
- It provides non-stop pain relief

Once he was relaxed enough, Bailey was brought into the treatment room, where an IV sedative was given. Then a tube was placed through his mouth into his wind pipe. Through the tube, a mixture of oxygen and anesthetic gas was delivered. The gas kept our patient asleep and provided pain relief.

An antibiotic and an NSAID were given IV. Then an epidural was administered into the spine (just like when a woman is about to deliver a baby). The epidural numbed Bailey's back leg.

The leg was shaved and scrubbed; Bailey had an injection of a local pain medication directly into the knee (similar to what we get at the dentist to numb our teeth).

Bailey was moved to the operating room where he had knee surgery.

Pain relief after surgery

As Bailey woke up from a successful surgery, an ice pack was placed on his knee. This simple technique is an effective way to decrease inflammation and pain.

The pain drip was then slowly tapered off overnight, while Bailey was switched over to oral medications. At one point, Bailey became agitated, so a tranquilizer (acepromazine) was given IV. This is not technically a pain reliever, but calming him down ultimately decreased his pain level by preventing him from moving too much.

Pain relief at home

Veterinary prescribed painkillers an NSAID and an antibiotic were continued for one week once Bailey went home.

Keeping an [E collar](#) (plastic cone) around Bailey's neck prevented licking and an infection. You could say that an E-collar is yet another way to decrease pain; it ensures that Bailey won't have to come back to have stitches re-sutured!

Note: Although not necessarily relevant to Bailey, one could very easily argue that weight loss at home is another way to decrease pain - although it's a longer term project. Less weight can make a huge difference to relieve pressure on sore joints.

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So, how many ways to relieve Bailey's pain did you count? I counted over a dozen. In my practice, all patients are provided with this same level of pain management. We always do whatever we think is necessary for our patients to be as comfortable as possible. Don't forget to [ask your veterinarian what her procedures are, before surgery.](#)

Despite what some clients may believe, we can't perform miracles. Surgery cannot possibly be 100% comfortable; fortunately, in the vast majority of cases, we can keep patients mostly pain-free.

By the way, the bulk of these pain-relieving techniques are administered by our wonderful nurses, which is a great reminder that they are a critical part of patient care and patient comfort.

If you have any questions or concerns, you should always visit or call your veterinarian -- they are your best resource to ensure the health and well-being of your pets.