## Epidural Analgesia

Epidural administration of local anesthetics and analgesics is an effective tool for veterinary anesthesia and analgesia. This technique is very useful for surgical procedures caudal to the diaphragm but is particularly well suited for procedures involving the hind limbs, pelvis and perineal region. Depending on what agent is used, desired results can be achieved with local anesthetics or analgesics.

The epidural space has a large amount of epidural fat that is inside the vertebral bone column. Even with a short period of weight loss the amount of epidural fat will not be affected. The spinal cord is surrounded by the meninges with the pia mater adhered to the spinal cord. The arachnoid and the dura mater are a combined layer, placing the cerebrospinal fluid between the pia mater and the arachnoid/dural layer. There is a venous plexus on the ventral floor of the vertebral column that will occasionally be entered. The vertebral level at which the cord and the dural sac (meningeal layers) end is variable in the dog and cat. In the dog the cord ends at L6-L7 and the dural sac at L7-S2. In the cat, they usually end further caudally (about one more vertebra).

The indication is to provide analgesia and anesthesia caudal to the diaphragm. It is an excellent means to provide anesthesia and analgesia to the pelvis, pelvic limbs and perineum.

- Epidural analgesia is very useful to control pain during and after surgery of the hindlimbs, tail, perineum, anus, and rectum. The analgesic effect of an epidural injection typically lasts for 12 to 24 hours.
- A patch of hair is shaved over the back above the base of the tail and the skin is cleansed with an antiseptic to prevent infection.
- A needle is inserted into the lower spine (lumbosacral junction). A drop of fluid is placed in the hub of the needle; if the fluid drop is sucked into the spine the anesthetist knows for sure that the needle is in the correct position.
- A syringe containing a narcotic and short-acting local anesthetic is injected.
- Side effects of epidural analgesia includes weakness of the hindlimbs, urinary retention/urinary leakage and delayed hair regrowth over the site of the epidural injection. These side effects are transient and resolve within 24 to 36 hours after the injection has been given.

understand tha	one Star Veterinary Surgical Services (LSVSS) at there are risks associated with my pet receiving	g an epidural. I realized that no guaranty or
warranty can e	thically or professionally be made regarding the	e results or cure.
Date	Pet Owner/Agent Signature	Phone I Can Be Reached at Today