**DISTAL PARAVERTEBRAL NERVE BLOCK**

Desensitizes spinal nerves T13, L1 & L2.

Location: The dorsal ventral rami of spinal nerves T13, L1 & L2 are desensitized at the distal ends of L1, L2 & L4.



Procedure:

* The injection site is palpated, located, shaved and swabbed.
* Insert an 18 gauge long needle ventral to the transverse process of L1 and inject lidocaine in a fan shaped pattern.
* Redirect the needle dorsally to the transverse process in a caudal direction and inject more lidocaine in a fan shaped pattern.
* Repeat this process for the transverse processes of the 2nd and 4th lumbar vertebrae.

Indication that the block was successful would be the same as seen in proximal paravertebral nerve block.

Table showing advantages and disadvantages of the techniques between proximal and distal paravertebral nerve blocks.

|  |  |  |
| --- | --- | --- |
| Techniques | Advantages | Disadvantages |
| Proximal Paravertebral  | Small dose of analgesicWide and uniform area of analgesiaand muscle relaxation,Minimal intra-abdominal pressure Increased intestinal tone and motilityAbsence of local analgesic from theoperative wound margins  | Technical difficultyArching up of the spine due toparalysis of the back muscles. Risk of penetrating vitalstructures such as the aorta andthoracic longitudinal vein onthe left side and the caudalvena cava on the right side. |
| Distal Paravertebral | The use of more routine sizeneedles, no risk of penetrating amajor blood vessel.Lack of scoliosis minimalweakness in the pelvic limb andataxia. | Larger doses of anesthetic areneeded. Variation in efficiency exists,particularly if the nerves varyin their anatomical pathway |