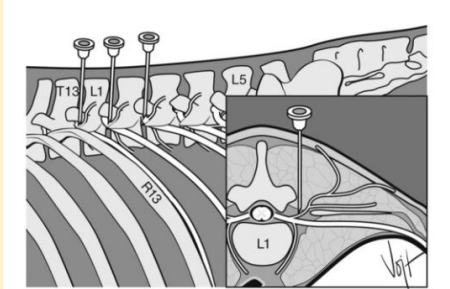
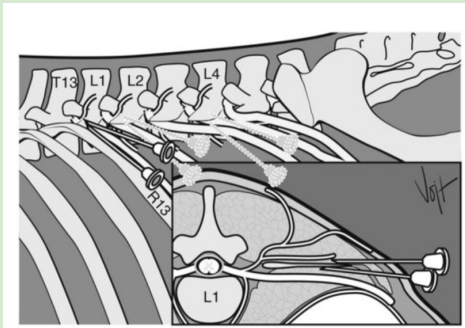


PARALUMBAR NERVE BLOCKS

Technique	Instruments	Procedure	Key Points
<p>Proximal paravertebral nerve block</p>  <p><small>FIG. 5-2 Needle placement for proximal paravertebral nerve block in cattle. Left: lateral aspect and cranial view of a transection of the first thoracolumbar vertebra at the location of the intervertebral foramen. R13 is the last rib; T13, L1, and L5 are the spinous processes of the last thoracic and the first and fifth lumbar vertebrae, respectively.</small></p>	<p>Needle: 20 gauge 1 ½'</p> <p>Syringe: 30 cc</p> <p>Anesthetic : Lidocaine 2%</p> <p>Saline</p>	<p>Locate the last rib- T13 then Lumbar 1& Lumbar 2 vertebrae</p> <p>Clip the hair above the vertebrae creating a rectangle approximately 5x3"</p> <p>Calculate dosage according to the weight of animal: $V=(WxD)/C$</p> <p>Palpate the first lumbar vertebra</p> <p>3cm from the midline, clean with an alcohol swab and inject at a 90° angle onto the transverse process</p> <p>"Walk" the needle cranially until it slips off the edge of the cranial transverse process of the 1st lumbar vertebra</p> <p>Inject 4mls of anaesthetic into the area to block nerve T13</p> <p>"Walk" the needle caudally until it slips off the caudal edge of the transverse process and inject 4mls of anesthetic to block nerve L1</p>	<ul style="list-style-type: none"> ❖ Area blocked- flank on the side on which the technique is performed ❖ Nerves blocked: Dorsal and ventral branches of T13, L1 and L2 <p>Disadvantages:</p> <ul style="list-style-type: none"> - Procedure difficult in fat animals - Arching of spine caused by paralysis of back muscles - No anesthesia of abdominal viscera

		<p>Repeat process on 2nd lumbar vertebra on the caudal aspect to anesthetize nerve L2.</p> <p>Test nerve block by sticking flank with needle and looking for any reactions from the animal.</p>	
<p>Distal Paravertebral Nerve Block</p>  <p><small>FIG. 5-3 Needle placement for distal paravertebral nerve blockade in cattle. Left lateral aspect and cranial view of a transection of the first lumbar vertebra at the location of the intervertebral foramen. R13 is the last rib; T13, L1, L2, and L4 are the spinous processes of the last thoracic and first, second, and fourth lumbar vertebrae.</small></p>	<p>Needle: 20 gauge 1 ½:</p> <p>Syringe: 30 cc</p> <p>Anesthetic: 2% Lidocaine</p> <p>Saline</p>	<p>Locate the last rib- T13 then Lumbar 1, Lumbar 2 and Lumbar 4 vertebrae</p> <p>Clip the hair above the vertebrae creating a rectangle approximately 7x3"</p> <p>Calculate dosage according to the weight of animal: $V=(W \times D)/C$</p> <p>Palpate the first lumbar vertebra</p> <p>Insert needle laterally to meet the tip of the transverse process. Withdraw the needle a short distance and reinsert it dorsal and caudal to the transverse process injecting 2ml of anesthetic per spot to block the T13 nerve</p> <p>Repeat the above step at the second and fourth lumbar vertebrae</p>	<ul style="list-style-type: none"> ❖ Area blocked- flank of side on which technique is performed ❖ Nerves blocked- dorsal and ventral rami of T13, L1 and L2 <p>Advantages:</p> <ul style="list-style-type: none"> - Minimizes risk of penetrating a major blood vessel - Lack of scoliosis - Minimal ataxia or weakness in the pelvic limb <p>Disadvantage:</p> <ul style="list-style-type: none"> - Variation in efficacy can occur, particularly if the nerves follow a variable anatomic pathway

		Test nerve block by sticking flank with needle and looking for any reactions from the animal.	
--	--	---	--