

A Minimally Invasive, Fast Spinal Cord Lateral Hemisection Technique for Modeling Open Spinal Cord Injuries in Rats

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Materials

Name	Company	Catalog Number	Comments
Augmentin (1,000 mg/200 mg powder)	GlaxoSmithKline, UK		One-time dose of s.c. antibiotics prophylactically (10 mg of amoxicillin and 2 mg clavulanic acid; Augmentin 1,000 mg/200 mg powder). Every day following surgery, 10 mg of amoxicillin and 2 mg of clavulanic acid (Augmentin 1,000 mg/200 mg powder) per day per animal
Betadine	EGIS, Hungary		Disinfect the skin of the surgical area using a povidone-iodine solution
Calypsol (50 mg/mL)	Richter Gedeon, Hungary		Anesthesia: combination of ketamine 80 mg/kg and xylazine 8 mg/kg intramuscularly
CP XYLAZIN 2% (20 mg/mL)	Produlab Pharma B.V., the Netherlands		Anesthesia: combination of ketamine 80 mg/kg and xylazine 8 mg/kg intramuscularly
Dental bone forceps	Dentech, Hungary	BS 0127	Remove the spinous processes of the 13 th thoracic vertebra and the 1 st lumbar vertebra using dental bone forceps
dental surgical micromotor	W&H, Austria	MF-TECTORQUE	Using a dental surgical micromotor, a laminectomy is performed at the L1 vertebra
optical microscope	Zeiss, Germany	OPMI19-FC	Control the procedure by viewing an enlarged (16x magnification) microscopic image
physiological saline solution (0.9% NaCl)	Fresenius Kabi, Germany		Keep the rat's eyes moist throughout the entire anesthesia using physiological saline solution drops (reapply as necessary)

raspatorium	Dentech, Hungary	FK 1164	Dissect the muscles attached to the vertebrae with the aid of a raspatorium, until all the spinal ligaments are visible.
retractor	Dentech, Hungary	RT 1253	
scalpel	Dentech, Hungary	BB 173	
scalpel	Dentech, Hungary	BB 184	
scalpel blade 12	B. Braun, Germany	12	
scalpel blade 20	B. Braun, Germany	20	
sterile cut gauze 10 x 10 cm	Sterilux, Hartmann, Germany		
sutures (monofilament, synthetic; absorbable and nonabsorbable), size: 4-0	B. Braun, Germany		
tweezer (13 cm)	Dentech, Hungary	BD 1555	
tweezer (delicate tissue forceps)	Dentech, Hungary	BD 1670	