

Protocol for Developing a Femur Osteotomy Model in Wistar Albino Rats

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Materials

Name	Company	Catalog Number	Comments
Alcohol	Raman & Weil Pvt. Ltd, Mumbai, Maharashtra, India	MFG/MD/2019/000189	Sterillium hand disinfectant
Artery forceps	Nebula surgical, Gujarat, India	G.105.05S	5", straight
Bard-Parker handle	Nebula surgical, Gujarat, India	G.103.03	Size number 3
Betadine solution	Win-medicare New Delhi, India	UP14250000001	10% w/v Povidone iodine solution
Cat's-paw skin retractor	Nebula surgical, Gujarat, India	908.S	Small
EDTA	Sisco research laboratories Pvt. Ltd, Maharashtra, India	43272	Disodium salt
Eosin	Sigma Aldrich, Merck Life Sciences Pvt Ltd, Mumbai, Maharashtra, India	115935	For preparing the staining solution
Forceps (plain)	Nebula surgical, Gujarat, India	115.06	6", plain
Forceps (toothed)	Nebula surgical, Gujarat, India	117.06	6", toothed
Formaldehyde	Sisco research laboratories Pvt. Ltd, Maharashtra, India	84439	For preparing the neutral buffered formalin
Haematoxylin	Sigma Aldrich, Merck Life Sciences Pvt Ltd, Mumbai, Maharashtra, India	104302	For preparing the staining solution
Hammer	Nebula surgical, Gujarat, India	401.M	
Injection Cefuroxime	Akumentis Healthcare Ltd, Thane, Maharashtra, India	48/UA/SC/P-2013	Cefuroxime sodium IP, 1.5 g/vial
Injection Ketamine	Baxter Pharmaceuticals India Private Limited, Gujarat, India	G/28-B/6	Ketamine hydrochloride IP, 50 mg/mL
Injection Xylazine	Indian Immunologicals Limited, Hyderabad, Telangana, India	28/RR/AP/2009/F/G	Xylazine hydrochloride USP, 20 mg/mL
Injection Lignocaine	Jackson laboratories Pvt Limited, Punjab, India	1308-B	2% Lignocaine Hydrochloride IP, 21.3 mg/mL

Injection Tramadol	Intas Pharmaceuticals Limited, Ahmedabad, Gujarat, India	MB/07/500	Tramadol hydrochloride IP, 50 mg/mL
K-wire	Nebula surgical, Gujarat, India	166 (1mm)	12", double ended
Mechanical drill for inserting K-wire	Bosch, Germany	06019F70K4	GSR 120-LI Professional
Metzenbaum cutting scissors	Nebula surgical, Gujarat, India	G.121.06S	6", straight
Needle holder	Nebula surgical, Gujarat, India	G.108.06	6", straight
Ophthalmic ointment	GlaxoSmithKline Pharmaceutical Limited, Bengaluru, Karnataka, India	KTK/28a/467/2001	Neomycin, Polymixin B sulfate and Bacitracin zinc ophthalmic ointment USP
Osteotome (chisel)	Nebula surgical, Gujarat, India	1001.S.10	10 mm, straight
Periosteal elevator	Nebula surgical, Gujarat, India	918.10.S	10 mm, straight
Pliers cum wire cutter	Nebula surgical, Gujarat, India	604.65	
Reynold's scissors	Nebula surgical, Gujarat, India	G.110.06S	6", straight
Standard semi-synthetic diet	Ashirvad Industries, Chandigarh, India	No catalog number available	Detailed composition provided in materials used
Steel cup for keeping betadine for application	Local purchase	No catalog number available	
Steel tray with lid for autoclaving instruments	Local purchase	No catalog number available	
Sterile gauze	Ideal Healthcare Industries, Delhi, India	E(0047)/14/MNB/7951	Sterile, 5cmx5cm, 12 ply
Sterile marble block for support	Local purchase	No catalog number available	Locally fabricated; autoclavable
Syringe and needle (1 mL)	Becton Dickinson India Pvt. Ltd., Haryana, India	REF 303060	1 mL sterile Syringe with 26 G x 1/2 (0.45 mm x 13 mm) needle
Syringe and needle (2 mL)	Becton Dickinson India Pvt. Ltd., Haryana, India	REF 307749	2 mL sterile syringe with 24 G x 1" (0.55 mm x 25 mm) needle
Syringe and needle (10 mL)	Hindustan Syringes & Medical Devices Ltd. Faridabad, India	334-B(H)	10 mL sterile syringe with 21 G x 1.5" (0.80 mm x 38 mm) needle
Surgical blades (size no.15)	Paramount Surgimed Ltd, New Delhi, India for Medline Industries Inc, IL, USA	REF MDS15115E	Sterile, Single use
Surgical blades (size no.24)	Paramount Surgimed Ltd, New Delhi, India for Medline Industries Inc, IL, USA	REF MDS15124E	Sterile, Single use
Sutures	Healthium Medtech Pvt Ltd, Bangalore, Karnataka, India	SN 3318	4-0, 16 mm, 3/8 circle cutting needle, monofilament polyamide suture
Wax block in aluminium tray	Locally fabricated	No catalog number available	30 cm x 30 cm x 4 cm aluminium tray containing wax (to prevent animal from slipping)
X-ray machine	Philips India Ltd, Gurugram, Haryana	SN19861013	Model: Philips Digital Diagnost R 4.2