

Materials List for

Urethral Stricture Induction Followed by Buccal Mucosa Graft Urethroplasty in a Rat Model

Pedro S. de Oliveira^{1,2}, Filipe Rocha¹, Inês Sofia Vala¹, Paula de Oliveira¹, Augusto Ministro^{1,3}, Susana Constantino Rosa Santos¹

¹Cardiovascular Center of the University of Lisbon (CCUL@RISE), Faculdade de Medicina da Universidade de Lisboa ²Department of Urology, Centro Hospitalar Universitário Lisboa Norte ³Department of Vascular Surgery, Centro Hospitalar Universitário Lisboa Norte

Corresponding Authors

Pedro S. de Oliveira
pedrosimoesdeoliveira@gmail.com

Susana Constantino Rosa Santos
sconstantino@medicina.ulisboa.pt

Citation

de Oliveira, P.S., Rocha, F., Vala, I.S., de Oliveira, P., Ministro, A., Santos, S.C.R. Urethral Stricture Induction Followed by Buccal Mucosa Graft Urethroplasty in a Rat Model. *J. Vis. Exp.* (194), e65094, doi:10.3791/65094 (2023).

Date Published

April 28, 2023

DOI

10.3791/65094

URL

jove.com/video/65094

Materials

Name	Company	Catalog Number	Comments
Atipamezole	OrionPharma		ANTISEDAN (atipamezole) is indicated for the reversal of the sedative and analgesic effects.
Buprenorphine	RichterPharma		Buprenorphine is a derivative of the opioid alkaloid thebaine that is a more potent (25-40 times) and longer lasting analgesic than morphine.
Carl Zeiss Opmi-1 FC Surgical Stereo Microscope	Carl Zeiss Microscopy, Germany		OPMI 1 FC from ZEISS symbolizes quality, precision and reliability. The manual system is easy to use and delivers high fidelity images with the legendary ZEISS optics.
Carprofen	Zoetis		Carprofen is a non-steroidal anti-inflammatory drug (NSAID) of the propionic acid class.
Catheter 22 G. x 1"	B Braun	Introcath Safety	IV Catheter of fluorinated ethylene propylene (FEP) with firmer construction for arterial access.
Enrofloxacin	Bayer		Enrofloxacin is a fluoroquinolone antibiotic.
Fentanyl	Braun	3644960	Fentanyl is a powerful synthetic opioid analgesic.
Flumazenil	Fresenius Kabi		Benzodiazepine antagonist is used for the complete or partial reversal of the sedative effects caused by benzodiazepines.
High temperature cautery	Fiab	F7244	Disposable cautery, sterile, high temperature (1200 °C), 28 mm fine tip.
Instillagel gel	Farco-pharma		Cellulose-based lubricant with local anaesthetic and disinfecting properties.

Iopromide	Bayer		Non-ionic injectable contrast medium, with iodine.
Laser Doppler imaging system (perfusion imager moorLDI2-HIR and dedicated software)	MoorLDI-V6.0, Moor Instruments Ltd, Axminster, UK	5710	The angiogenesis models uses Laser Doppler imaging to assess blood perfusion in the hind limbs, one of which is ligated surgically. Dedicated measurement and comparison software allows the definition of regions of interest for blood flow assessment on the ischaemic versus non-ischaemic limb to establish a "reperfusion ratio" which can be assessed as often as needed and over a number of days on the same subject.
Lubrithal Eye Gel	Dechra		Eye gel used in animals for prevention of dry eyes during anaesthesia. Lubricating and moisturising action on cornea and conjunctiva.
Male Wistar Han IGS (CrI:WI(Han) rats	Charles River Laboratories, Spain		Twelve to fourteen-week-old
Metedomidin	Virbac	037/01/07RFVPT	Medetomidine is a synthetic drug used as surgical anesthetic.
Midazolam	Labesfal		Benzodiazepine medication is used for anesthesia and procedural sedation.
Monoplan Angiography System	Philips Medical Systems	Azurion 7 M20	A stationary diagnostic fluoroscopic x-ray system specifically designed to optimize the capability of users to visually and quantitatively evaluate the anatomy and function of blood vessels of the heart, brain and other organs, as well as the lymphatic system.
Mosquito forceps	Henry Schein	102-4346	Hartman-Mosquito Hemostatic Forcep Curved 3-1/2" Stainless Steel
Needle Holder	Henry Schein	100-2570	Needle holder Mayo-Hegar, stainless steel, 14 cm
Ophthalmic Needle Holder	Asico	AE-6143	Needle holder barranquer most delicate without lock
Pentobarbital Sodium	Ecuphar		Pentobarbital Sodium is the sodium salt of pentobarbital used for euthanasia.
Pointed Forceps	Aesculap	BD335R	Microforceps, 0.30 mm tip
Polysorb 6.0	Medtronic (Covidien)	UL-101	Coated Synthetic Absorbable Suture aimed to reduce the inflammatory reaction in tissues, followed by gradual encapsulation of the suture by fibrous connective tissue.
Providone-Iodine	Mylan		Povidone-iodine 10% is an antiseptic drug, used as a disinfectant before and after surgery.
Scalpel Blade n°11	B Braun	BB511	Carbon steel, sterile
Spring Scissor	Henry Schein	600-4826	Surgical scissors 31 castroviejo
Surgical Forceps	Aesculap	BD33R	Microforceps, 0.20mm tip
Surgical Scissor	Aesculap	MA873R	Micro Iris Scissor, curved shrap tips
SurgiPro 7.0	Medtronic (Covidien)	VP-702-X	Non-Absorbable Monofilament Polypropylene Suture indicated for use in general soft tissue ligation.