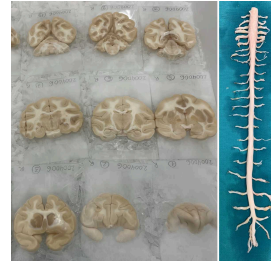


Feb 22, 2024

Protocol for "non-human primate necropsy"

DOI

<https://dx.doi.org/10.17504/protocols.io.rm7vzxzw5gx1/v1>



jlanciego¹

¹Center for Applied Medical research (Cima) University of Navarra



Jose Lanciego

Center for Applied Medical Research (Cima) University of Nav...

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.rm7vzxzw5gx1/v1>

Protocol Citation: jlanciego 2024. Protocol for "non-human primate necropsy". protocols.io

<https://dx.doi.org/10.17504/protocols.io.rm7vzxzw5gx1/v1>

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: February 22, 2024

Last Modified: February 22, 2024

Protocol Integer ID: 95602

Keywords: spinal cord from the skull, removal of the brain, spinal cord, skull, procedure, standard procedure, removal

Funders Acknowledgements:

Aligning Science Across Parkinson's through the Michael J. Fox Foundation for Parkinson's Research

Grant ID: ASAP020505

Disclaimer

Nothing to declare

Abstract

Here we describe the standard procedure conducted for performing a non-human primate necropsy, followed by removal of the brain and spinal cord from the skull and backbone, respectively.

Image Attribution

Jose L. Lanciego

Animal preparation

- 1 Pre-surgical anesthesia: to be induced with ketamine (5 mg/Kg) and midazolam (0.5 mg/Kg), administered intramuscularly
- 2 Terminal anesthesia: to be induced with an overdose of sodium pentobarbital (200 mg/Kg).

Prefusion and pre-histological processing

- 3 Perform a T-shape incision with a scalpel through the thorax and abdomen.
- 4 Open and retract the chest cavity to visualize lungs and heart.
- 5 Open the left ventricle to allocate the infusion cannula at the level of the aortic infundibulum and fixed it.
- 6 Open the right atrium, getting started with the perfusion protocol at a constant rate of 3,500 ml/h) with an infusion pump.
- 7 First solution: 1,000 ml of saline Ringer solution.
- 8 Second solution: 3,000 ml of a buffered solution made of 4% paraformaldehyde and 0.1% glutaraldehyde in 0.125 M PB pH 7.4
- 9 Third solution: 1,000 ml of a buffered solution made of 1% dimethylsulphoxide (DMSO) and 10% glycerin in 0.125 M PB pH 7.4
- 10 Brain extraction: Once perfusion was completed, the brain and the spinal cord are removed from the skull and the backbone, respectively. 10 mm-thick brain blocks are made and the pia matter carefully removed under a dissection microscope. Brain blocks were stored for 48 h in a cryoprotectant solution containing 2% DMSO and 20% glycerin in 0.125 M PB 7.4