



Tuesday, August 29, 2023 1:37 PM

Surgeon	Shay	Procedure Protocol	Headcap	Procedure Date	9/29/25
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Pre-operative weight 23.9 g Weight of any implanted devices 0.29 g

Surgery

Induction time	12:43	Removal from isoflurane	16:21	Righting reflex	16:28
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Pre-operative drug name	Dosage/Route	Amount	Time Dosed	Post-operative drug name	Dosage/Route	Amount	Time Dosed
Lidocaine 2%	Max 10 mg/kg at incision SC 20 mg/ml	0.1	13:30	Lidocaine JELLY!	JELLY		16:21
Buprenorphine OR use XR/SR NOT BOTH!	0.03 mg/kg SC			Meloxicam	2 mg/kg SC 5 mg/ml	0.1	16:27
Ethiqs XR Lab	Check bottle (between shoulders)						

Ear bars 2% Lidocaine Jelly	13:08
Lactated Ringer Solution 10 ml/kg/hour SC	Double dose at 14:40, single dose for remaining: 14:40, 15:40, 16:00

Anesthesia

Time	13:27	14:16	14:42	16:18						
Breaths/min	48	68	48	36						
Paw pinch (+/-) + Response - No response	-	-	-	-						
Isoflurane % in O2	1.5 -> 1.3	1.5	1.25	1.0						
Temperature	29.3 rising	35.8	35.8	35.8						

Notes:

Procedure relevant experimental notes

Craniotomy site(s)

Target (e.g., dorsal HPC, vHC)	AP	ML	DV	Purpose (e.g., virus injection, electrodes, cranial window, etc.)

Notes:

Main struggle here was prototyping/testing out different ways of getting GND contact. Animal did fine and recovered quickly. Ready for VNS cuff implant whenever. Lowering headbar with the adapter hit the nose cone. This needs to be reprinted and made taller to avoid contact.

Post-operative care

Buprenorphine Dosing: ~~Dose 1:~~ Surgery onset. Day 0. ~~Dose 2:~~ 6-8 hours after dose 1 or end of surgery day. Day 0. ~~Dose 3:~~ 8-12 hours after dose 2. Day 1. ~~Dose 4:~~ Lower concentration, 0.02 mg/kg. Day 2.

Ethiqs XR OR Buprenorphine SR LAB Dosing: ~~Only dose at the onset of surgery.~~

Meloxicam Dosing: **Dose 1:** End of surgery before righting reflex recovery. Day 0. **Dose 2:** 18-24 hours after dose 1, given with buprenorphine. Day 1. **Dose 3:** 18-24 hours after dose 2. Day 2.

BP = BUPRENORPHINE; MX = MELOXICAM; LR = Lactated Ringer

Below, note rat status during post operative recovery. Measures can include overall grooming, signs of pain/distress, mobility, nesting behavior, eating/drinking, rearing, signs of bleeding/infection. BAR = Bright, alert, responsive. QAR = Quiet, alert, responsive

Date – Time	Weight	Drugs Dosed	Notes
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Animal euthanasia date & reason	
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Signature	I certify that I have followed the protocol that has been approved by the IACUC and taken every step in minimizing pain and distress and upheld the highest standards of animal husbandry and welfare that I am capable/know of.
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