



Sparks Brain Preservation

A Non-Profit Organization | Established 2005

HQ: 3265 Marietta St SE, Salem, OR

503-585-2781 (24/7)

<https://sparksbrain.org>

Case Report - Pet Patient 3 - 2016

Case Background

Canine

Boston Terrier, Age: 14

Case Data

This was a scheduled event. A local veterinarian came to our facility to perform the euthanasia. The pet patient began taking 80 mg of aspirin per day 5 days prior to the procedure.

Day 0 - Monday - 9:30 am - The family and pet patient arrived at our facility along with the local veterinarian.

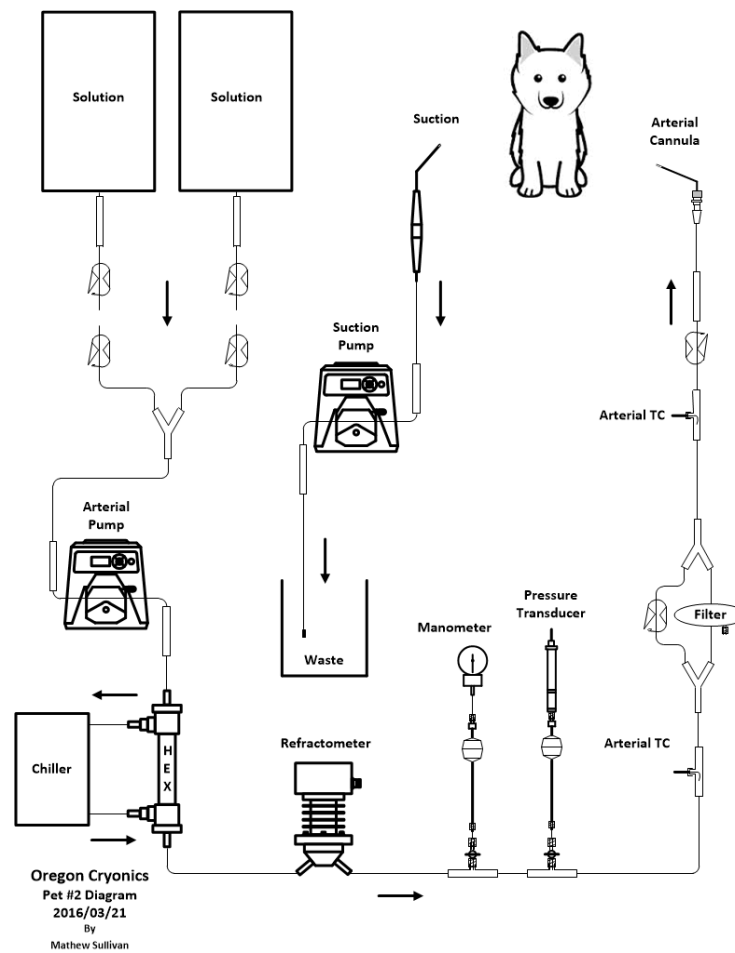
- 10:10 am - The veterinarian performed euthanasia
- 10:17 am - The veterinarian pronounced the pet patient and administered 750 mg Sodium Citrate 200mg/mL into the IV line.
- 10:18 am - Pet placed in an ice bath on the right side and we began chest compressions.
- 10:49 am - Surgery started. The aorta was not easily accessible, so the brachiocephalic artery was isolated.
- 11:19 am - Cannula inserted into brachiocephalic artery and 3 cm up into the left common carotid artery.
- 11:20 am - Washout started and an incision was made in the right atrium for effluent.
- 11:51 am - Cryoprotective perfusion began.
- 1:49 pm - A 11 stepped M22 perfusion was completed using a total of 6.88 L of perfusate.
- 2:25 pm - Surgical isolation of the brain began, lasting approximately 25 minutes.
- After isolation, a cooling ramp continued for 35 hours.

This was an Alcor case and perfusion was performed at our facility. The brain was then transported to Alcor for permanent storage.

After sub-zero cooling the pet patient's cryoprotected brain was transferred to liquid nitrogen. It was shipped overnight to Alcor a week later in a dry shipper, and the temperature logger showed that the temperature stayed at -196 for the entire trip.

Perfusion Data

Perfusion Circuit

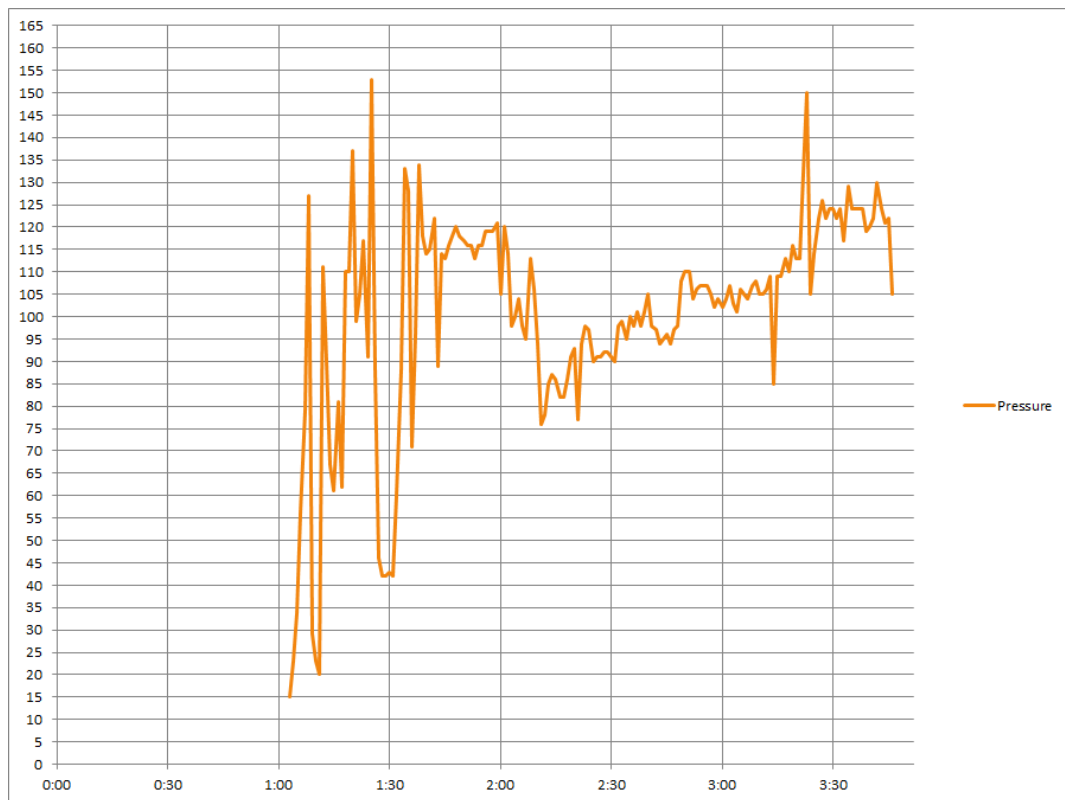


Temperature:

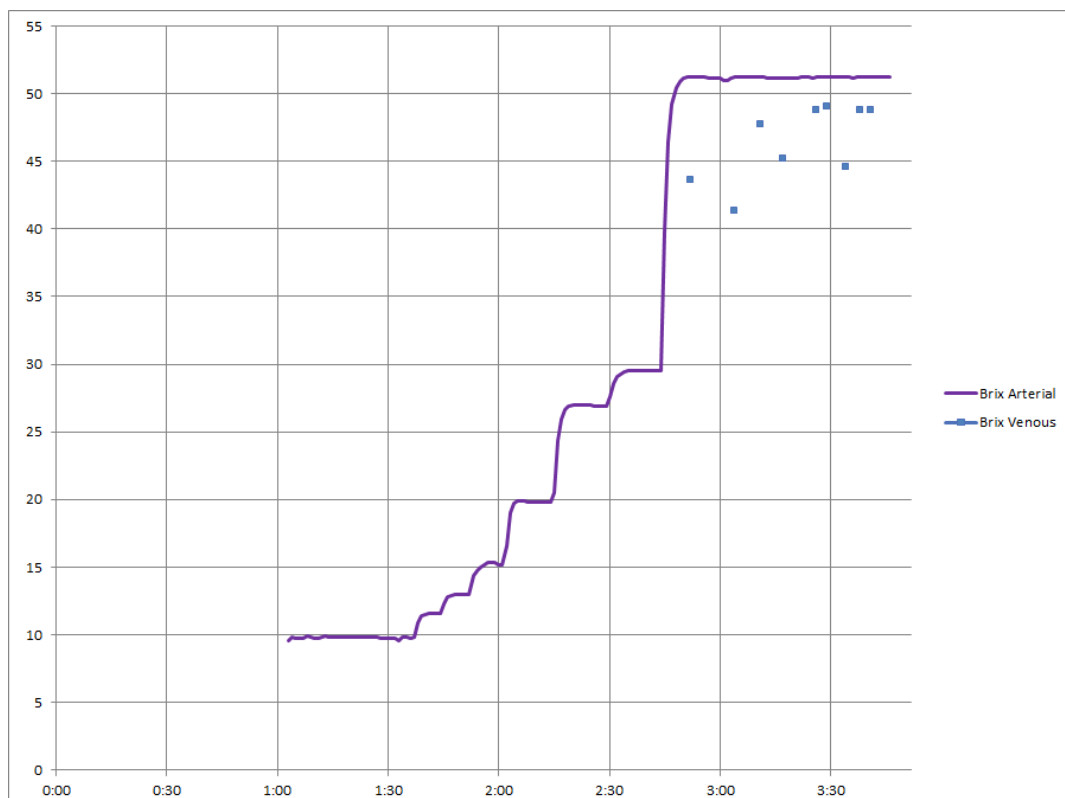


Pressure:

These are line pressures, not patient pressures. The pressures prior to about 2:00 PP may be off by up to 5 mmHg due to pressure calibration.

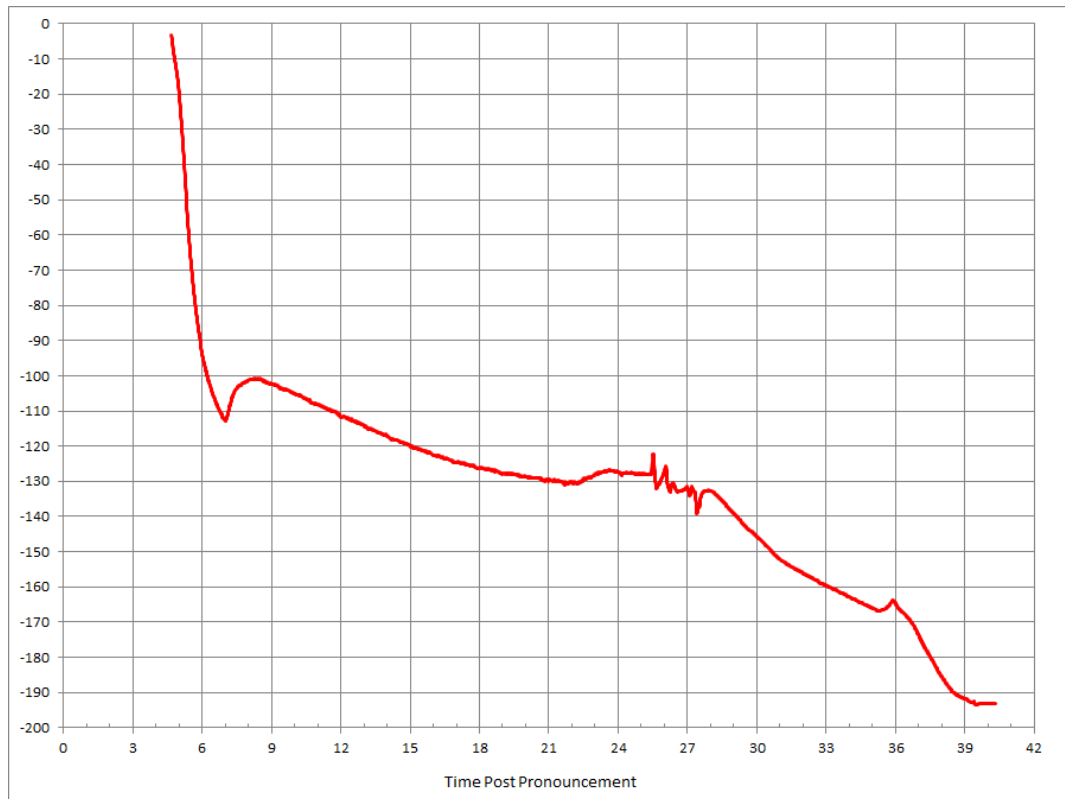


Refractive Index:

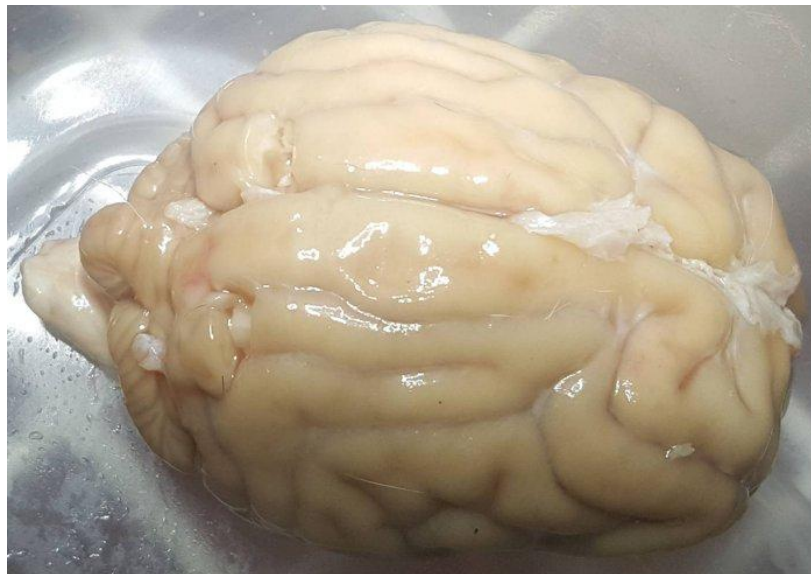


Sub-Zero Cooling:

Concentrated M22 was drizzled on the surface, and a thermocouple was placed between the hemispheres. The brain was placed in a closed plastic container, on dry ice, in a precooled LR-40 dewar. Cooling continued on a ramp for 35 hours to -196.



Gross image post perfusion procedure:



Ischemic time total: 33 minutes