



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 2 - 2014

Case Background

Canine

Shih Tzu, 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 4 days prior to the procedure.

Day 0 - Tuesday - 9:20 am - The family and pet patient arrived at our facility along with the local veterinarian.

- 9:55 am - The veterinarian performed euthanasia

- 10:12 am - The veterinarian pronounced the pet patient. Placed in ice bath on right side and chest compressions started shortly after.

- 10:18 am - 7 mL Sodium Citrate 200 mg/mL into IV line, followed by 6 mL of saline. Chest compressions continued.

- 11:15 am - Surgery started. The heart was noted to be enlarged, the descending aorta was clamped above the diaphragm. While isolating the major arteries, the brachiocephalic artery began to leak. Because of this, it was decided to cannulate this artery.

- 2:01 pm - A 7 stepped M22 perfusion was completed using a total of 9.4 L of perfusate.

- 2:03 pm - Surgical isolation of the brain started, lasting about 12 minutes.

- 2:15 pm - The brain was placed on Dacron wool in an open container and lowered into liquid nitrogen vapor for cool down.

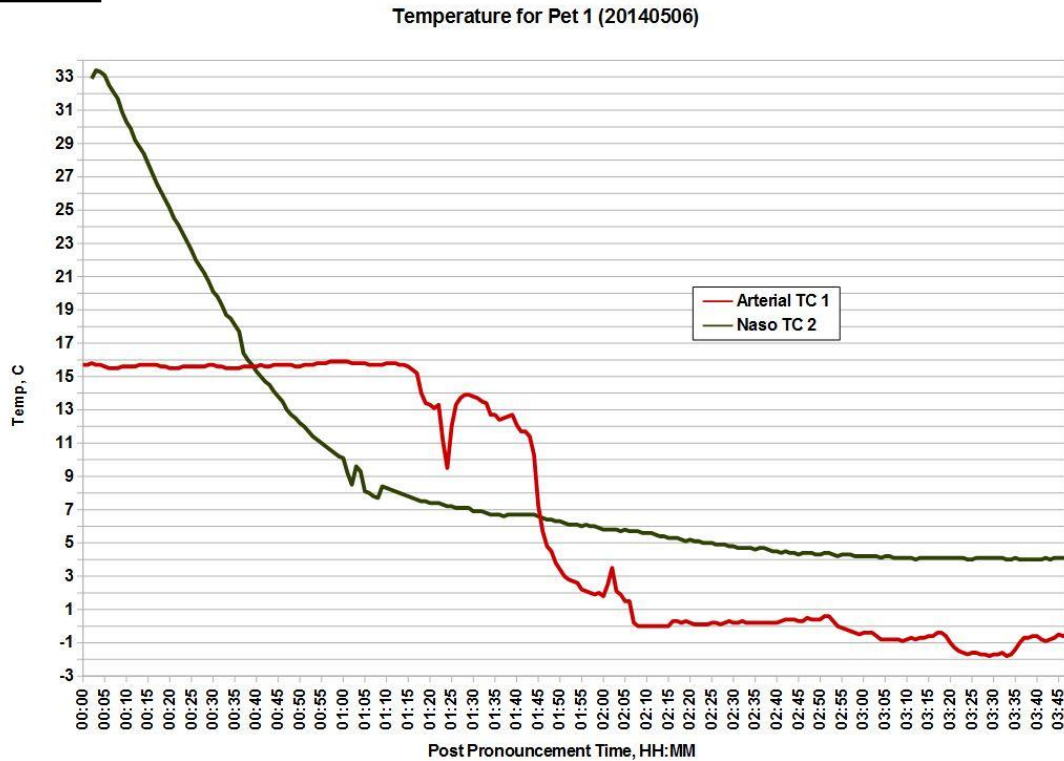
Day 7 - Tuesday - The container was lowered until it was floating on the liquid nitrogen.

Day 8 - Wednesday - The temperature of the Dacron wool was -155°C. The container was then lowered into the liquid nitrogen.

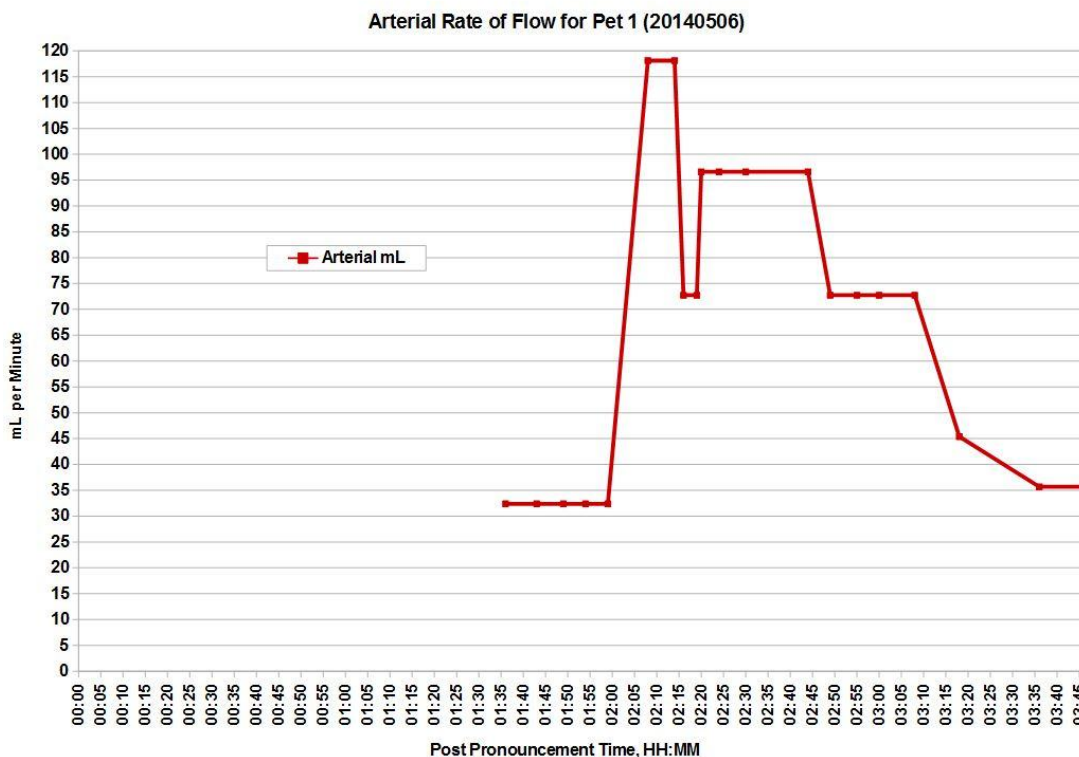
Perfusion Data

Pressure was monitored throughout the procedure, but it was line pressure rather than patient arterial pressure. Afterward, the circuit pressure was tested with both water and ethylene glycol at various flow rates. Subtracting these baseline values from the observed pressure readings gave estimates for arterial pressure fluctuating generally between 100 and 150 mm Hg.

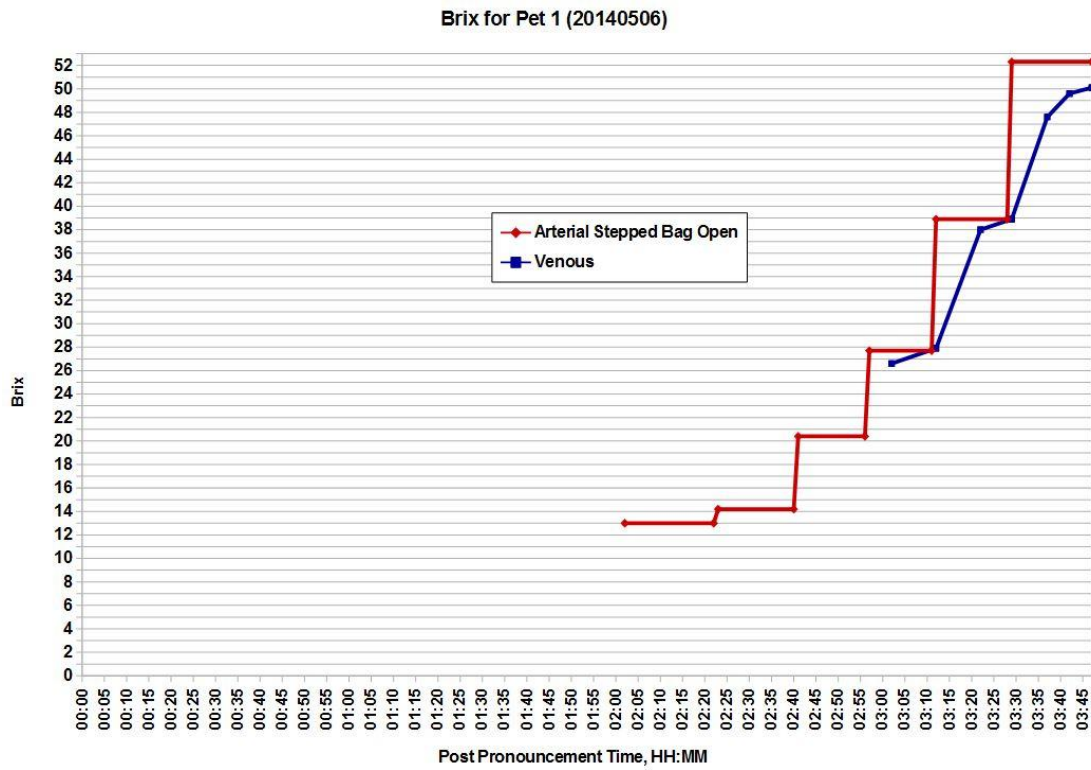
Temperature:



Arterial rate of flow was derived from the speed setting on the roller pump:



Refractive Index:



Picture taken prior to being submerged in liquid nitrogen



Ischemic time total: 25 minutes