



Telemetry Blood Pressure + Electroencephalograph

Surgery Code: TELEMBPEEG

The telemetry blood pressure plus electroencephalograph (EEG) model is of benefit to preclinical or research studies by recording unbiased physiological responses that transmit wirelessly, providing better data on the body's reactions to drugs/compounds.

Animal Models

Typical selections are listed below; however, choices for strain, age and weight may be limited due to model anatomy and/or physiological conditions.

- Rats: male/female, any strain, weight \geq 225 g
- Guinea pig: male/female, any strain, weight \geq 250 g

Procedure Details

- **Perioperative care:** Please view our Pre- and Postoperative Care Sheet, which can be found at www.criver.com/opcare.
- **Housing:** The animals must be singly housed until suture/wound clips are removed.
- **Diet:** No special diet is required.
- **Postoperative holding period:** At a minimum, post-op animals with carotid artery or femoral artery placement are held 2 days, with the majority of animals shipping within 7 days of surgery. Animals with BP device implantation via the abdominal aorta approach are held 7-10 days postoperatively to allow adequate wound healing before shipping.
- **Maintenance:** Wound clips should be removed 7-10 days after surgery.

Surgical Summary

Abdominal Aorta Approach

(Standard method for rat and guinea pig)

The pressure sensor catheter is inserted into the abdominal aorta and advanced cranially, then the body of the transmitter is slipped into the abdominal cavity. The EEG leads are passed through the abdominal wall and tunneled subcutaneously to the cranium, then placed into pre-drilled holes and secured with bone graft powder and liquid. If the device has a suture tab, the tab is secured to the abdominal wall when closing the muscle with suture.

Carotid Artery Approach

(per request for rat and guinea pig)

The pressure sensor catheter is inserted into the carotid artery and advanced to the aortic arch. A subcutaneous pocket is made through the ventral neck incision and the body of the transmitter is placed subcutaneously on the left side, between the thorax and abdomen. The EEG leads are tunneled subcutaneously to the cranium, then placed into pre-drilled holes and secured with bone graft powder and liquid. The body of the transmitter can be slipped into the abdominal cavity per request.

Surgical Summary (Continued)

Femoral Artery Approach

(Per request, rats only)

The body of the transmitter is placed subcutaneously on the left flank with the pressure catheter facing caudally. The pressure sensor catheter is tunneled subcutaneously from the dorsal incision to the inguinal incision. The pressure sensor catheter is inserted into the femoral artery and advanced into the abdominal aorta. The EEG leads are tunneled subcutaneously to the cranium, then placed into pre-drilled holes and secured with bone graft powder and liquid.

IACUC

The Charles River Institutional Animal Care and Use Committee (IACUC) governs the entire surgical process, including all anesthesia, analgesia, animal preparation and any postoperative holding in Charles River facilities prior to shipment. Review of experimental protocols, authorization to order animals that are surgically modified from Charles River, and all aspects concerning the use of the animals after they arrive at the institution are the responsibility of the receiving institution's IACUC.

Contact Us

For more information, visit www.criver.com/surgery. For specific surgery-related questions, please contact our technical experts at 1.877.CRIVER.1 (1.877.274.8371) or askcharlesriver@crl.com. To place an order or get a quote, contact our Customer Service Department at 1.800.LABRATS (1.800.522.7287).