

TELEMETRY EEG/EMG IMPLANTATION

ORDER CODE: EEG/EMG
SPECIES: Rats, Mice
DIET SUPPLEMENT: None

This procedure involves implantation of EEG and EMG leads to the brain and muscle. The resulting model is used to monitor EEG and/or EMG telemetrically.

Surgical Procedures

The animal is prepared for surgery using pre-operative and anesthetic procedures as described in our Surgical Capabilities Reference Paper, Vol. 13, No.1, 2005. The hair over the skull and dorsal neck is clipped and disinfectants applied. A 3cm (rats) or 2 cm (mice) midline sagittal incision is made in the skin starting above interaural line towards dorsal neck. A subcutaneous pocket is created from this incision towards the dorsal flank. The body of the telemetry device is inserted into the pocket with the leads routed to the exposed cranium. The connective tissue on the exposed skull is removed with a sterile cotton tip applicator. The underlying bone suture, Lambda, is identified. Holes are drilled through the skull 2 mm on each side of the midline and 2 mm anterior of the lambda fissure. Stainless steel screws are placed through the holes in contact with dura. The leads from one differential pair are placed under the screws and the further secured with dental acrylic. The second pair of differential leads are placed approximately 5 mm apart longitudinally on the musculature of the neck for EMG monitoring. The skin incision is closed.

IACUC

Charles River's Institutional Animal Care and Use Committee (IACUC) govern the entire surgical process, including any post-operative holding in CRL facilities prior to shipment. The receiving institution's Animal Care and Use Committee, investigators, and animal care staff are responsible for the well-being of the animal subsequent to its arrival. Justification for use of surgically-modified animals, review of experimental protocols, authorization to order animals that are surgically modified from Charles River, and all aspects concerning the use of surgically-modified animals after they arrive at the institution are the responsibility of the receiving institution's IACUC.