

COMMON CAROTID ARTERY CATHETERIZATION

ORDER CODE: CARART

SPECIES: Rat, Mouse, Guinea Pig

DIET SUPPLEMENT: None required

Vascular catheters are surgically placed in various species to facilitate the repeated or routine sampling of fluids, or to allow for repeated or routine injections of materials. The pharmacological distribution and metabolism of the material being evaluated, in conjunction with the anticipated response in the animal model being used, determines the which vessel to catheterize.

Surgical Procedure

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. A small skin incision is made on the neck. The osmohyoid muscle is separated longitudinally and retracted laterally to expose the left carotid artery. A portion of the artery close to the thyroid gland is isolated. A loose ligature is placed caudally and the artery is ligated rostrally. A small incision is made between the ligatures into which the catheter is inserted. The catheter is secured in place by tying the loose ligature around the catheterized vessel. Patency is tested. A small incision is made in the scapular region to serve as the exit site of the catheter. The catheter is subcutaneously tunneled and exteriorized through the scapular incision. The position of the catheter is checked prior to closing the vessel incision site with wound clips. A stay suture is placed in the scapular area. Patency is tested, and the catheter is filled with a locking solution and sealed with a plug. A subcutaneous skin pocket is made cranially. The excess length of catheter is tucked into the skin pocket. The scapular area skin incision is closed with wound clips.

IACUC

Charles River's Institutional Animal Care and Use Committee (IACUC) governs 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.

April 2000