

SUPRARENAL ARTERY CATHETERIZATION

ORDER CODE: RENALART

SPECIES: Rat

DIET SUPPLEMENT: None required

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

Surgical Procedure

The animal is prepared for surgery using preoperative and anesthetic procedures as described in our *Surgical Capabilities Reference Paper*, Vol. 13, No.1, 2005. An abdominal midline incision is made through the skin and abdominal musculature. The left inferior suprarenal artery is identified. A loose ligature is placed on the proximal portion of the isolated left inferior suprarenal artery, while the distal end of the vessel is also ligated. A small incision is made in the artery between the two ligatures and a catheter is inserted and advanced until the tip reaches the renal artery. The proximal ligature is tied around the catheterized vessel. Patency is tested. The musculature in the left abdominal wall is punctured; the free end of the catheter is pushed up through the wall and secured to it with a suture. The incision in the abdominal musculature is closed with suture and the skin with wound clips. A small skin incision is made in the scapular region, through which the catheter is subcutaneously tunneled and exteriorized. A stay suture is placed on the catheter. Patency is tested again. The catheter is locked with solution and sealed with a metal plug. A subcutaneous pocket is made cranially. The excess length of the catheter is tucked into the skin pocket. Wound clips are used to close the skin incision and secure the plug.

IACUC

Charles River's Institutional Animal Care and Use Committee (IACUC) governs the entire surgical process, including any postoperative holding in Charles River 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.

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