

DOUBLE JUGULAR VEIN CATHETERIZATION

ORDER CODE: JUGJUGVEIN

SPECIES: Rat, Guinea Pig

DIET SUPPLEMENT: None required

Vascular catheters are surgically placed to facilitate the routine sampling of blood and 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 which vessel to catheterize. In this case, the catheter on the animal's left is preferred for infusion, while the catheter on the right is for blood sampling.

Surgical Procedure

The animal is prepared for surgery using pre-operative procedures as described in our *Surgical Capabilities Reference Paper*, Vol. 13, No.1, 2005. A ventral midline incision is made in the neck. Two additional parallel skin incisions are made at the scapulae region. The right submaxillary gland is isolated to expose the jugular vein, which bifurcates into the anterior and posterior facial veins. Beyond the bifurcation, the anterior facial vein is isolated. A loose ligature is placed before the bifurcation, and the cranial end is ligated. An incision is made into the anterior facial vein between the ligatures. A catheter is inserted through the incision and advanced toward the superior vena cava. The cranial ligature is tied around the cannulated vessel and patency of the catheter is tested. The catheter is subcutaneously tunneled and exteriorized through the right scapular incision. A stay suture is placed in the scapular area. Once again, 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 skin incision is closed with a wound clip, and the catheter plug is then secured to a wound clip.

The above procedure is repeated for the catheter on the left side. Upon completion, the midline neck 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 at their institution. 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.