

LEFT CORONARY ARTERY LIGATION

ORDER CODE: MYOINFARC

SPECIES: Rat

DIET SUPPLEMENT: None required

This procedure involves the ligation of the left anterior descending coronary artery to bring on a myocardial infarction.

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 cranio-caudal incision is made on the chest, slightly to the left of the sternum, through the skin and the pectoral muscles. The third and fourth ribs are transected, and the intercostal muscles are blunt dissected. The thoracic cavity is rapidly entered, and the pericardium completely opened. The heart is exteriorized through the incision. The pulmonary cone and left auricle are identified. A small curved needle is used to pass a piece of 5-0 silk suture under the left anterior descending coronary artery. The ligature is tied, and the heart is replaced into the thorax. The air in the thoracic cavity is gently squeezed out while the thoracic wall and skin incision is closed. The animal is resuscitated using positive pressure ventilation and placed in an oxygen rich environment.

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.

April 2000