T400-Series Surgical Protocol

Sheep Ovarian Artery: Acute Blood Flow Measurement

APPLICATION BASICS

Site: Ovarian artery

Species: Sheep Weight: 40 kg Duration: Acute

PROBE

Size: 4 mm (side exit)

Reflector: U with wide silicone shield

Connector: 10-pin Cable Length: 1 meter

Catalog #: MA-4PSS-USW-WC100-CRA10-GA

FLOWMETER TS420 Perivascular Module

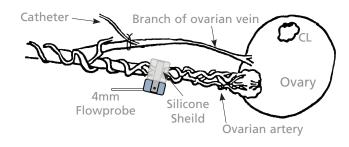
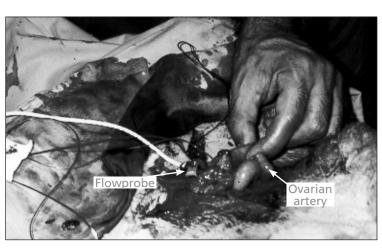


Fig. 1: Location of venous catheter and Flowprobe. The ovarian artery is derived from the aorta and runs a mildly tortuous course close to the surface of the utero-ovarian vein.



Surgical Approach

Anesthetize ewe with 5% sodium thiopentone at 10-15 mg/kg, and maintain after intubation by closed system inhalation anesthesia, using halothane (1-4%) along with oxygen.

Place anesthetized ewe in dorsal recumbency and open the abdominal wall by a ventral incision just anterior to the mammary gland, and expose the uterus and ovaries. Dissect a section of the ovarian vascular plexus just above the uterine anastomosis and 4 cm from the ovaries free of connective tissue and separate from major ovarian veins. Place the Flowprobe around the vascular structure as shown in Fig. 1, and suture the transducer cable in place and exteriorize via the mid-line incision and suture the cable to the skin. Close the abdominal wall temporarily during the blood flow measurement.

REFERENCE

Rabiee RA, Lean IJ, Gooden JM, O.Brien J, " A New Method for Evaluating Ovarian Function in Sheep," Proc. Nutr. Soc. Aust. 17: 224, 1992

