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coloMOCA implantation protocol

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Protocol status: Working
We use this protocol and it's working

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Abstract

This protocol describes the implantation of our bowel device (ColoMOCA) in pigs.

Anesthesia

1 Anesthetize/prep the animal for surgery.

Aseptic procedures by trained personnel are utilized during the surgery. All tools are sterilized prior to insertion. Drapes will be used and personnel performing surgery will wear clean surgical scrubs, and sterile gowns/gloves and masks.

Laparotomy

2 Make a midline suprapubic incision ~9 cm long to expose the peritoneal cavity and viscera.

Colotomy

3 Make a single, small incision into the colon.

Insert and anchor ColoMOCA

4 Insert device through the small incision and secure in place with sterile non-absorbable sutures.

Test Wireless Transmission

5 Wake the coloMOCA with radio if not already awake. Confirm data transmission.

Close incision

6
- Close the colon with an absorbable suture in an interrupted pattern
- Close the peritoneum and fascia with absorbable sutures using a continuous suture pattern.
- Close the subcutaneous tissue and skin with non-absorbable monofilament suture with a cutting needle, using an interrupted suture pattern.Skin staples may also be used.

Test Wireless Transmission (2)

7 Confirm data transmission and then put device to sleep

CT-Imaging

8 Image to verify placement of the sensor.

Place jacket on the pig

9 Place and zip the jacket on the pig while still anesthetized.

Wake up the animal

10 Stay with the animal until fully awake. Return to pig room.