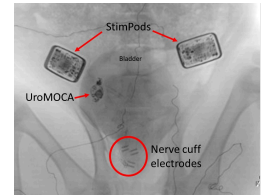


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# UroMOCA and StimPod Device Implantation

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Dennis Bourbeau<sup>1,2</sup>, Brett Hanzlicek<sup>3</sup>

<sup>1</sup>MetroHealth Medical Center, Cleveland, OH; <sup>2</sup>Louis Stokes VA Hospital, Cleveland, OH;

<sup>3</sup>Advanced Platform Technology Center, Louis Stokes VA Hospital, Cleveland, Ohio



Brett Hanzlicek

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**We use this protocol and it's working**

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## Abstract

This protocol describes the implantation procedure of the wireless bladder device (UroMOCA) and of the wireless stimulation device (StimPods) into pigs.

## Before start

Perform standard surgical prep.

## UroMOCA implantation into bladder

- 1 Clean the incision site using Betadine solution and isolate the prep area with sterile towels. Sterile instruments will be used.
- 2 Place animal in supine position.
- 3 Insert single lumen 8 Fr catheter.
- 4 Administer analgesic at injection site.
- 5 Expose the bladder by making a dorsal midline incision.
- 6 Incise bladder dome.
- 7 Place UroMOCA device into bladder.
- 8 Close bladder incision and evaluate integrity.
- 9 Place sterile drape on abdomen for UroMOCA transmission coil.
- 10 Verify function of UroMOCA in vivo.
- 11 Close abdominal incision.

## StimPod Implantation

- 12 Place animal in prone position.

- 13 Administer analgesic at injection site.
- 14 Disinfect and drape lower back.
- 15 Make a dorsal midline sacral incision to expose the sacral spine from the second-to-last lumbar dorsal spinal process to the end of the sacrum.
- 16 Perform a laminectomy to remove the bone of the spine to expose the sacral roots from S1 to S2.
- 17 Implant 4 nerve cuff electrodes, including one each around the sacral root S1 left side, S1 right side, S2 left side and S2 right side.
- 18 Place EMG electrodes along the pelvic floor.
- 19 All electrodes will be attached to 2 wireless, implantable stimulation devices (StimPod, Micro-Leads, Boston, MA).
- 20 Verify function of StimPods in vivo (Power, Data transmission).
- 21 Confirm motor response (visual and EMG) to sacral root stimulation on each nerve cuff electrode.
- 22 Close back incision.
- 23 Monitor animal until recumbent.