

Aug 13, 2019

Conscious Cystometry Bladder Function Testing 👄

Firouz Daneshgari¹

¹Case Western Reserve University



dx.doi.org/10.17504/protocols.io.3fegjje

Diabetic Complications Consortium
Tech. support email: rmcindoe@augusta.edu



ABSTRACT

Summary:

Cystometry is a test of bladder function in which pressure and volume of fluid in the bladder is measured during filling, storage, and voiding. A cystometry study is performed to diagnose problems with urination, including incontinence and urinary retention.

This test should be done on the mice two days after SPT Implantation.

Diabetic Complication:



Uropathy

Reference

1. Cannon TW, Damaser MS: Effects of anesthesia on cystometry and leak point pressure of the female rat. Life Sci 69:1193-1202, 2001

EXTERNAL LINK

https://www.diacomp.org/shared/document.aspx?id=52&docType=Protocol

- 1 Use scissors to cut the sealed tube located between the animal's ears.
- 2 Attach the end of the tube not connected to the metabolic cage swivel device to the tube between the animal's ears.
- 3 Start the saline syringed filled pump (Kent Scientific Corporation, Torrington, CT, USA) to flush debris within the animal's tube for about 2 minutes.

- 4 Using the preset pump configurations (3 ml/hour) fill the bladder via a stopcock with room temperature saline and record bladder pressure by using a pressure transducer connected to an amplifier (BP-100, CB Sciences, USA) for a period of 2-5 hours.
- 5 Collect urine in a beaker mounted on a force transducer (FT-03 D, Grass Instrument Co, Quincy Massachusetts) placed beneath each cage.
- 6 The pressure and force transducers should be connected to a multi-port controller with software (Polyview, Grass Instrument Co, Quincy Massachusetts) to record data through the computer.

This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited