Germ-free Vasectomy of mice

Instruments required:

Surgical Kit (autoclaved and double-wrapped) 1 pair of curved forceps 2 pair of fine straight forceps 1 pair curved sharp scissors Autoclip applicator Autoclips Silk Suture with curbed needle attached Needle holder Hair removal tweezers

Anaesthetic base plate (baked, double-wrapped and autoclaved) Pipework for anaesthetic equipment (double-wrapped and autoclaved)

- 1. Using standard germ-free techniques, transfer 6-10 week old male mice into a surgical Isolator and attach isolator to the surgical Hood with appropriate sleeve.
- 2. Sterilize the sleeve (2% peracetic acid using standard protocol) and leave for 60 mins before venting.
- 3. Sterilize the Laminar Flow Hood (using standard protocol)
- 4. Wash hands using xxxxx
- 5. Put on a sterile surgical gown and gown using a closed technique.
- 6. Receive the sterile instruments into the hood and set up the anaesthetic equipment.
- 7. Import a cage of germ-free males via the inner quadralock.
- 8. Place one mouse on the anaesthetize plate and anaesthetize.
- 9. Lay the mouse on its back and pluck the hair from the lower abdomen.
- 10. Using the curved scissors and forceps make an incision (~1 cm long) across the lower abdomen approximately 0.5cm anterior to the genitals.
- 11. Make another incision through the peritoneum.
- 12. Locate the vas deferens, which will be lying on either side of the bladder.
- 13. Grasp the vas deferens with the forceps and cauterize out one section (~4-5 mm long) with the edge of a pair of scissors heated to 100C in a sterile....
- 14. Cut out the section of vas deferens between the two cauterized areas and place on a sterile swab.
- 15. Repeat the procedure on the other side.
- 16. Sew up the incision in the body wall using the silk suture.
- 17. Close the skin with Autoclips.
- 18. Place the mouse back into the cage and allow to recover before transferring the cage back into the surgical isolator through the quadralock door.