

Procédure Normalisée de Fonctionnement

TITRE : IMPLANTATION DE MINI-POMPE OSMOTIQUE ALZET CHEZ LA SOURIS	NUMÉRO : CHX-3
DESTINATAIRES : Personnel du Service des animaleries et usagers	Version 1 : 2007 Version 5 : 20.05.2016
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BUT : Décrire les étapes d'implantation de mini-pompe osmotique Alzet chez la souris.	

MATÉRIEL :

- Female mice Crl: CD-1 *Foxn1^{nu}* 28-42 days from Charles River laboratories
- 1 sterile syringe BD 1ml with 26G3/8 needle for subcutaneous injection
- BNP (antibiotic ointment)
- Isofluran anesthetic gas machine
- Isofluran
- Anesthetic mask
- Induction cage
- Ringer USP injection
- Primed Alzet osmotic mini-pump
- Iris scissors
- 1 curved blunt micro-forceps
- 1 straight micro-forceps 1/2 teeth
- 1 Mosquito hemostat
- 1 micro needle holder
- Electric heating pad
- Sterile surgical fields
- Sterile cotton gauzes
- Prolene 5/0 sterile individual pack
- Germinator
- Sterile self piercing ear tags
- Sterile tags from National Band and Tag Co #1005-1 MONEL
- 70% alcohol
- 1% Proviordine
- 1% Virkon Solution

PROCÉDURES :

1. All material, which may enter in contact with mice during procedures, must be sterilized with steam or disinfected with a 1% Virkon solution and washed with 70% alcohol.
2. The mouse is anesthetized in the induction cage with a combination of Isofluran (5 % concentration) and medical oxygen (1L/minute).
3. When the mouse is asleep, the Isofluran concentration is diminished between 1.5 and 2.5% (oxygen rate stay the same).
4. The mouse is then weigh and identified with a sterile ear tag on the left ear.

5. The mouse is maintained anesthetized with the mask. The mouse is put in right lateral decubitus.
 6. By pinching posterior paw between nails removal reflex is checked (do not squeeze or break bones). If the mouse removes her paw, Isofluran concentration is increased by 0.5% (wait 1 or 2 minutes and check reflex again).
 7. The exposed part of the mouse is disinfected with sterile gauze saturated with proviodine 1% solution or 70% alcohol.
 8. A pinch of skin below the scapula is pulled up with micro-forceps 1/2 teeth and an incision is made with Iris scissors.
 9. With the Mosquito hemostat create a skin pocket enough large to insert the pump.
 10. The pump is gently inserted in the skin pocket using the micro-forceps 1/2 teeth (do not pull too much on the tissue to prevent tearing).
 11. The skin is closed with Prolene 5/0 using a simple continuous "invisible" suture. Two external interrupted sutures can be done to maximize security.
 12. Antibiotic ointment is applied on the wound.
 13. A 250µl subcutaneous injection of lactate Ringer is given to the mouse (for hydration purpose).
 14. The mouse is taken off anesthesia and stays under observation until full recovery.
- N.B.: Between each mouse, instruments are cleaned and rinsed with distilled water and dried with gauze. They are then inserted in the Germinator for 15 to 20 seconds. Do not use them immediately because they are extremely hot.