



Subcutaneous Catheterization: Handling Instructions

All procedures must be performed using aseptic technique. To ensure animal comfort and safety, procedures are conducted with the assistance of a second person to gently restrain the animal while the catheter manipulation and care is carried out.

Materials

- Sterile syringes (at least two - one for dosing and one for saline flush/lock)
- Sterile 23-gauge (rat, guinea pig) or 27-gauge (mouse) blunted needle/adaptor
- Sterile 0.9% saline solution for injection
- Sterile 70% alcohol wipe/gauze

Dosing Procedures

1. Clean the incision site using a surgical skin disinfectant.
2. Loosen the wound clip that secures the catheter and plug. Gently pull the plug, together with the catheter, and out of the skin pocket. It is easier to put the catheter back in the skin pocket if only 1-2 inches of the catheter is pulled out.
3. Thoroughly clean the exposed catheter with a sterile 70% alcohol wipe/gauze, paying careful attention to the area around the distal tip and plug.
4. To remove the plug, use a hemostat to clamp the tip of the plug. Pull the hemostat and the plug with one hand, while the junction of the tubing at the plug is held firmly with forceps. Clean the plug thoroughly with a sterile 70% alcohol wipe/gauze and place in a sterile container of surgical disinfectant.
5. The catheter is locked with sterile saline which may be readily infused into the subcutaneous space. Attach the saline syringe and gently flush with double the catheter's dead volume of saline to ensure the catheter tip is clear. See surgery paperwork for catheter dead volume.

6. Attach the compound dosing syringe to the catheter and administer the appropriate amount.
7. Attach the saline syringe and flush the compound through the catheter with a volume equal to that of the catheter's dead volume.
8. Using a cushioned instrument, clamp the end of the catheter and remove the syringe. Using sterile forceps, rinse the plug in sterile saline and replace in the catheter. Release the pressure with the cushioned forceps and push the plug into the catheter tip, leaving only one-third exposed.
9. Clean the catheter with a 70% alcohol sterile wipe/gauze.
10. Carefully place the catheter back into the subcutaneous pocket using sterile forceps, then gently tighten the wound clip to secure the catheter tip/plug in place.

Additional Information

- Animals must be housed individually.
- Catheters should initially be flushed 5-7 days after surgery and then every 5-7 days throughout the study. Surgery dates are listed on the surgery paperwork that is supplied with each order.
- The wound clip securing the catheter plug needs to be changed every 7-10 days, starting from the surgery date, to ensure catheter security. Surgery dates are listed on the surgery order paperwork supplied with each order.