CARE AND USE OF CAROTID ARTERY CATHETER WITH VASCULAR ACCESS BUTTON (VAB)

- The purpose of carotid artery catheterization is blood withdrawal.
- Our catheters are made of polyurethane. The catheter is 1-2 French with a square tip.
- The silicone disk VAB used for this procedure is from Instech, cat# VAB62SMBS/25.
- The catheter should be flushed with sterile saline and refilled with sterile catheter lock solution 6 days after order ship day. This should be repeated every 7 days.
- Use positive pressure technique when flushing the catheter to improve long term catheter patency.
- Aseptic technique must be used when performing this procedure.

Material required:
- Sterile catheter lock solution: We recommend heparin/glycerol (500 IU heparin/ml)
- Sterile 0.9% saline
- Sterile swabs/gauze
- 70% ethanol
- (3) 1 ml syringes with (3) PinPort™ injectors (Instech cat# PNP3M)
  - Withdrawal Syringe: Syringe with injector, filled with 0.5 ml sterile saline
  - Flushing Syringe: Syringe with injector, filled with 1 ml sterile saline
  - Lock Solution Syringe: Syringe with injector, filled with appropriate amount of lock solution

Procedure for maintenance of carotid artery catheter:
1. Immobilize the mouse. We recommend use of isoflurane anesthesia or a commercially available restrainer.
2. Clean the top of the VAB with a sterile swab/gauze dampened with 70% ethanol and let dry.
3. Attach the Withdrawal Syringe to the VAB. Withdraw the catheter lock solution until blood is seen in the PinPort™ injector.*
4. Detach the Withdrawal Syringe from the VAB. If using the same syringe on additional mice, expel blood from the Withdrawal Syringe.
5. Attach the Flushing Syringe to the VAB and flush with 0.05 ml of sterile saline.
6. Detach the Flushing Syringe from the VAB.
7. Attach the Lock Solution Syringe to the VAB and fill catheter with 0.01 ml of catheter lock solution.
8. Detach the Lock Solution Syringe from the VAB.
*If the lock solution cannot be removed, reposition/manipulate the mouse and retry. If the lock solution still cannot be withdrawn, replace the Withdrawal Syringe with the Flushing Syringe and introduce sterile saline in the catheter.
For additional help with catheter maintenance please contact our Technical Information Service at micetech@jax.org