

Application and use of the Quick Connect Infusion System in the Rat:



Figure 1. Harness

The following is a description of the application of the Quick Connect System Harness (Fig 1.) in the rat. This harness system can be applied during the surgical catheterization procedure or applied post-operatively. The system includes a harness and an easy to attach luer-connection (facing away from the animal), which may have a variety of post-luer connections. The catheter connection end (facing the animal) resides on the underside of the restraint in a dome. The animal-facing side has a luer-stub tubing connector within a dome of various sizes (typically either 21-23 needle gauge) that will fit catheters appropriate for rat venous and arterial applications including the jugular, femoral and carotid vessels.

Tubing sizes for Luer-Stub Adaptors (Animal Facing Connectors):

<u>Harness</u>	<u>Polyurethane (PU)</u>	<u>Polyethylene (PE)</u>	<u>Silicone</u>
QCK-23 ID	0.020-0.23" suggested 0.040 x 0.024	ID 0.023" suggested: PE50	0.019-0.022"
QCK-21 ID	0.027-0.030" suggested 0.040 x 0.024	ID 0.030" suggested: PE60	0.00.026-0.029"

Procedure: The harness is placed on the animal with plenty of slack of the belly bands so that the dome of the harness may be partially inverted for catheter connection (Fig. 2.). After the harness is placed on the animal and the dome is fitted to a position midscapularly, the harness is inverted enough to expose the luer-stub connector. The lateral edge of the dome is lifted up slightly to further expose the lure-stub end (Fig. 3.).

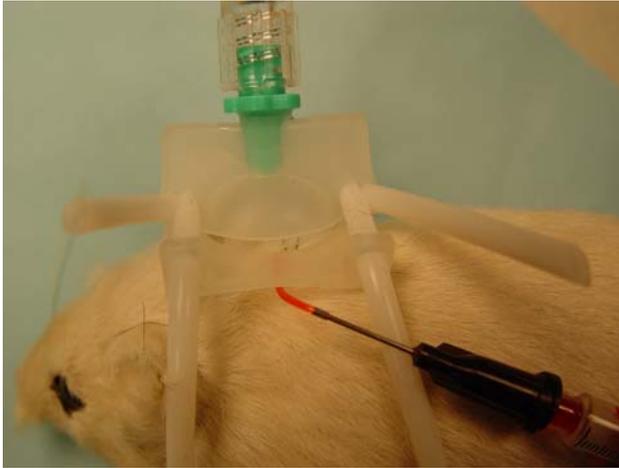


Figure 2. The harness loosely fitted on the rat. An indwelling catheter is externalized and connected to a syringe via a blunt needle.

The catheter is then connected to the lure-stub (Fig. 4). The catheter should be slid on as far as possible (typically ~ 3 mm) with gentle application to insure that the catheter end is not deformed. A fine atraumatic forceps may be used to slide the catheter on the luer-stub as far as possible to insure a tight fit (Fig.5).



Figure 3. The harness is slight everted from the rats back and the edge of the dome is lifted to expose the lure-stub tip externalized and connected to a syringe

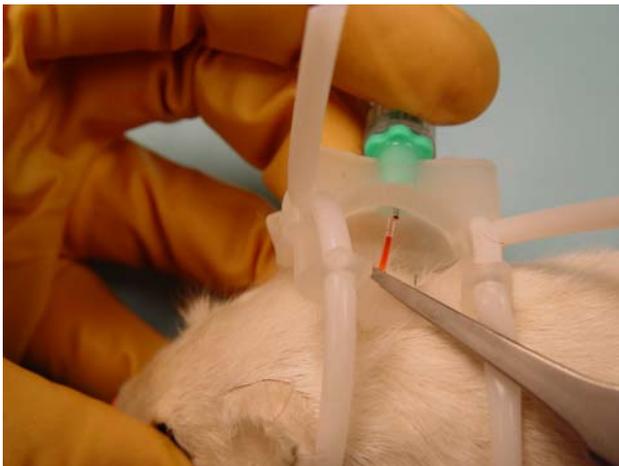


Figure 4. The catheter is connected to the lure-stub tip. An atraumatic forceps may be used to assist in slipping the catheter over the luer-stub.



Figure 5. The catheter is connected to the lure-stub tip ~ 1 mm. To insure a secure fit the catheter should be advanced on the luer stub 2-3 mm.

*Note: to insure air does not enter the animal's vascular system, both the catheter and the harness should be filled with flush solution prior to connection. Following the connection of the catheter, the harness is returned to the appropriate position over the back and the bellybands are tightened appropriately for the animal's size to insure no movement of the harness. It is suggested that the patency of the catheter system be re-tested after the catheter is connected and the harness is secured. **Note:** If excess catheter material is exposed it may be slid within the subcutaneous pocket of surgical exit site.*

Applying the Tether & Swivel to the harness:

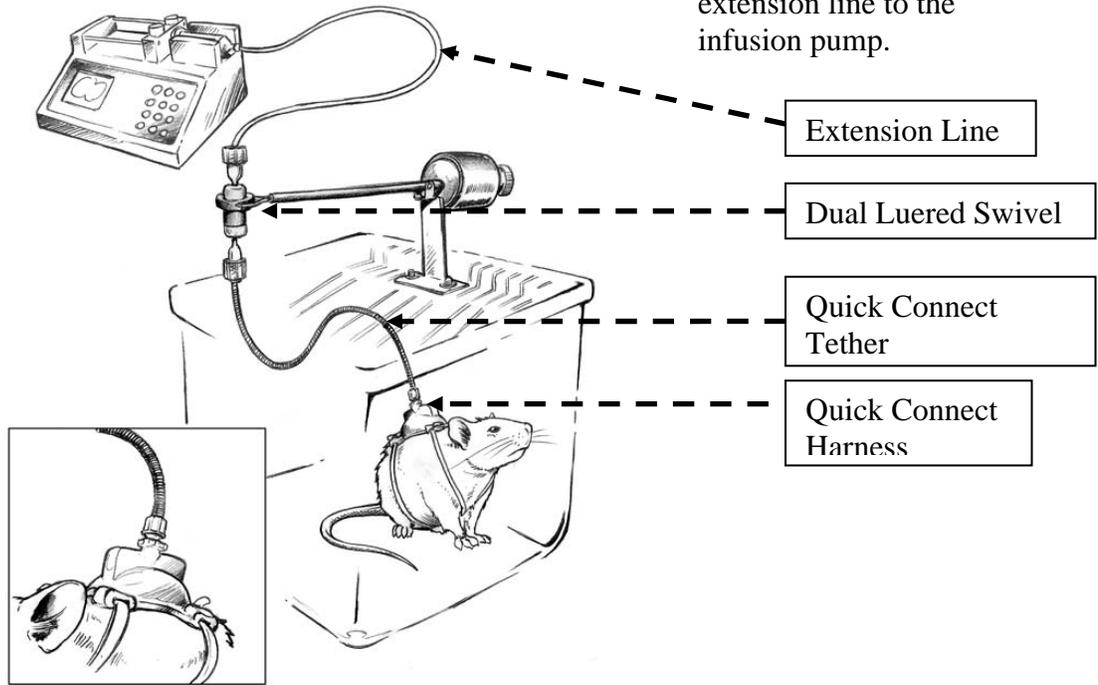


- 1) Connect tether to swivel & flush with flush solution (typically sterile normal saline) to insure air is removed from the system with a syringe, leaving the syringe on the swivel.



- 2) Remove the injection cap from the harness and quickly connect the harness to the tether.
- 3) After the system is connected, it is again suggested that the system is flushed with a flush solution to insure patency.

4) Attach a swivel a holder above the cage and complete the system by attaching the extension line to the infusion pump.



Please note: We also sell the swivel holder and balance arm, please review the catalog for further descriptions

P.O. Box 850498
Braintree MA 02185
www.braintresci.com

Phone (781) 917-9526
Fax (978) 244-8917
info@braintresci.com