



Bile Duct Catheterization: Mouse 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

1. Sterile 70% alcohol wipe/gauze
2. Sterile 0.9% saline solution for injection
3. 27-gauge connector
4. Sterile 0.015" diameter metal plug or clamp

Procedure

1. Clean the incision site using a surgical skin disinfectant.
2. Thoroughly clean the exposed catheter and skin with a sterile 70% alcohol wipe/gauze.
3. Cut the bile loop in order to access the bile flow.
Bile flow from the left side may be noticed at this time.
4. Plug the duodenal end (right side) of the catheter using a sterile catheter plug.
5. Extend the left side of the catheter as needed using a piece of tubing and 27-gauge connector.
6. After collecting bile, clean the 27-gauge connector with a sterile 70% alcohol wipe/gauze and use to connect the two ends of the catheter.

Additional Information

1. It is best to study the model within 7 days after the surgery, as changes in blood chemistry may be noted after this time period.
2. A daily check for signs of obstruction is recommended to verify bile flow in the loop. To maintain bile flow, we suggest flushing the duodenal end with 0.9% sterile saline (0.05 mL).
3. A 1-1.5 cm catheter loop is located in the scapular region.
4. The direction of the bile flow is from the animal's left to right.