**Vagotomy and Tamoxifen treatment**

1. Surgical subdiaphragmatic vagotomy was performed in 1-month-old male and female SNCAbow;Vil-CreERT2 mice.
2. Prior to surgery, all surgical instruments were sterilized. Syringe, needles, sutures, and scalpels were used from sterile packs, which were opened at the time of the operation.
3. Dissecting instruments were sterilized before using on the next mouse.
4. Surgeon washed their hands thoroughly for 5 minutes before donning sterile gloves.
5. Surgeon maintained a sterile operating field during the operation.
6. Lubricant eye ointment was applied to mouse eyes to prevent corneal drying.
7. Mice were anesthetized with ketamine/xylazine at a dose of 87/13 mg/kg by intraperitoneal injection. Adequate anesthesia was determined by lack of movement, lack of response to tail pinch, and lack of whisker twitching.
8. Buprenorphine 0.05 mg/kg was administrated subcutaneously before the surgery.
9. After initial anesthesia, the mouse was placed on top of a heating pad lined with a silicone pad within the stereotactic apparatus field. Heating pad was maintained at a temperature of 37°C.
10. A mid-line incision was made with scissors to expose the abdominal contents.
11. Immediately below the diaphragm, the vagus nerve was identified and isolated from surrounding connective tissue and vessels.
12. A 2 mm section of the vagus nerve was excised.
13. Mice were monitored intra-operatively for signs of arousal. Mouse breathing was continuously monitored throughout the surgery by observing chest wall movement.
14. The laparotomy was closed in two layers with suturing and surgical clips. The inner layer of skin was sutured with a continuous suture pattern using 5-0 monofilament absorbable suture and the outer skin was closed with 9 mm stainless steel wound clips (MikRon Precision Inc).
15. Analgesic bupivacaine (1-2 drops) was applied to the incision site after suturing and the animals will be allowed to awaken.
16. Following surgery, mice were assessed every 30 minutes until they returned to baseline level of activity with no signs of breathing complications or lasting motor deficits.
17. The well-being of the mice will be recorded in the post-surgery monitoring log. Postoperatively, mice will be given analgesics.
18. Mice were administered analgesics (buprenorphine hydrochloride at a dose of 0.05 mg/kg) and observed daily for 5 days for any signs of infection, distress, or changes in behavior.
19. Mice were given free access to food and water.
20. In sham-operated animals, abdominal laparotomy was performed, and the vagus nerve was exposed but not excised.
21. Weight loss of ~15% was noted in mice undergoing vagotomy compared to sham surgery.
22. One week after surgery, mice were treated with tamoxifen dissolved in corn oil (50 mg/kg) or vehicle administered by intraperitoneal injection daily for five days.

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