Dynamic weight bearing 動態負重測試

1. **Purpose**
   1.1 To examine the spontaneous pain of a mouse by using bioseb dynamic weight bearing system.

2. **Safety Requirements**
   2.1 General laboratory procedures should be followed, which include: no eating, no chewing gum, no drinking, and no applying of cosmetics in the work area. The researcher must wear the laboratory coat, gloves and a mask during the experiment.

3. **Associated Documents**
   3.1 https://www.bioseb.com/bioseb/anglais/default/item_id=1213_cat_id=5_Advanced+Dynamic+Weight+Bearing.php
   3.2 https://www.sunpointworld.com/products/dynamic-weight-bearing/

4. **Notes**
   4.1 The mice must be maintained in a controlled environment with stable temperature, humidity, and air pressure. Keep minimal disturbing and stress on the tested mice whenever is possible.
   4.2 The majority of mouse behavioral studies are age/sex/strain dependent. It is important to have the age-matched mice with the same sex and strain background in a single experiment.
   4.3 The dynamic weight bearing measures the balance of mice limbs and tail. Therefore, mice toes should not be injured and tail cut (for genotyping) should be minimal.

5. **Quality Control**
   5.1 The mouse shall be habituated in the testing room 30 min before the test.
   5.2 Calibrate the image and pressure sensor of dynamic weight bearing system before the starting of the measurement.
   5.3 Record the time whenever the system shows detected error.

6. **Equipment**
   6.1 A computer for dynamic weight bearing.
   6.2 An image capture of dynamic weight bearing.
   6.3 A pressure sensor of dynamic weight bearing.
   6.4 A cage of dynamic weight bearing.
   6.5 A partition to reduce the environmental noise.

7. **Supplies**
   7.1 Cap.
   7.2 Gloves.
   7.3 Facial Mask.
   7.4 Ethanol 70%.
   7.5 Paper towel.
   7.6 Kimwipes.
   7.7 HOCl.

8. Procedures

8.1 To measure the body weight of each mouse.

8.2 The mouse shall be habituated in the room for 30 min before the test.

8.3 Calibrate the image and pressure sensor of dynamic weight bearing system.

8.4 Enter the information of body weight and set up the system.

8.5 Put the mouse in the cage of dynamic weight bearing system and record for 5 minutes.

8.6 Place the mouse back to the home cage.

8.7 Repeat steps 1-4 until all mice finish the dynamic weight bearing test.

8.8 Analysis the data and export the data.