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| **File Name:** |  |
| **Wt:** |  |
| **Dose:** |  |
| **Volume Injected:** |  |
| **Injection type:** |  |
| **Notes/Bleeding:** |  |

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| --- | --- |
| **Time** | **Comment** |
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**Drug Injections while EEG Recording**

1. Weigh mouse.
2. Connect preamp to head stage. Verify EEG signals then begin recording.
3. Collect baseline.
4. Measure out dose to inject (eg 25g mouse @ 0.1mg/ml 🡪 measure out 0.25ml). For less then 0.3mL, use Terumo h-100 insulin syringe (29G). For more than 0.3mL, use 1mL syringe.
5. When ready to inject, scruff mouse and pinch by shoulders. Follow below instructions for s.c. injection.
6. Place mouse back in cage with cage top. Verify camera viewing angle is sufficient.
7. Monitor behavior and EEG.

 **Subcutaneous Injections (s.c.)**

1. Restrain the mouse by the scruff method. Use your thumb and forefinger to make a tent of skin over the scruff.
2. When injecting an awake mouse, place the mouse on the wire lid so it can hang on with its front paws during the injection. Scruff the skin over the back and tent it up. Your hand is both restraining the mouse and presenting the area to be injected.
3. Insert the needle at the tent base, being careful to avoid directing the needle at your fingers. Your fingers should be at top of the tent, safely above the point of the needle’s entry. Hold the needle parallel to the animal’s body to also avoid puncturing underlying structures.
4. Aspirate to ensure that the needle has not entered a blood vessel.
5. Inject the full volume at a moderate rate.
6. Withdraw the needle and then press the skin to seal the needle’s exit hole in the skin and to prevent the fluid from leaking out.
7. Check the animal for any bleeding.
8. Because the fluid has been deposited in the subcutaneous space, you can see and feel the bubble of fluid, called a bleb.
9. Note: Mice will generally not object to a subcutaneous injection when they are allowed to grasp the wire lid.

**Intraperitoneal Injections (i.p.)**

1. Restrain the mouse by the scruff method. Expose the ventral side of the animal, tilting the head down at a slight angle.
2. The sterile needle should be placed, bevel up, in the lower right or left quadrant of the animal’s abdomen.
3. Insert the needle at a 30° angle.
4. Aspirate to ensure proper placement and inject the material.

<https://www.jove.com/science-education/10198/compound-administration-i>