



Standard Operating Procedure Rodent Decapitation

1.0 Scope and Application

The 2013 AVMA Guidelines for the Euthanasia of Animals states that decapitation is acceptable with conditions if performed correctly and that it may be used when required by experimental design and approved by the IACUC. Decapitation may be accomplished by the use of a commercial guillotine, dedicated scissors, or razor/scalpel blades. Scissors and razor/scalpel blades may only be used for neonatal rodents (≤ 10 days of age).

2.0 Summary of Method

- **Training Requirements**
 - The Principal Investigator (PI) must ensure that all personnel using the guillotine are properly trained and proficient in its use.
 - Personnel wishing to perform decapitation without anesthetics or analgesics must be trained by an LAR veterinarian or ACUC-approved trainer prior to performing procedure.
- **Preparing for decapitation**
 - The PI and laboratory personnel are responsible for ensuring that the equipment is always in good working condition prior to any use.
 - Good working condition means that guillotines and dedicated scissors are clean, in good condition, sharp and move freely. The actions should be smooth with no perceptible binding or resistance, and the blades must be rust-free, sharp, and decapitate with minimal force. Razor or scalpel blades should be new.
- **Decapitation procedure**
 - All personnel performing decapitation must be properly trained. Training must be documented in a laboratory maintained log indicating training date and trainer. ACU personnel are available to provide training if requested.
 - The decapitation procedure should be performed in an area that is separate from other rodents.
 - The guillotine should be placed on a clean and stable bench top or other stable surface. Use of razor or scalpel blade should be upon a firm surface.
 - If the animal is not anesthetized prior to decapitation, every effort should be made to ensure the animal is calm prior to performing the procedure. A decapicone is recommended but is not required.
 - Hold the animal securely, and place the animal on the stage at the entrance to the guillotine.
 - Advance the animal's head gently but firmly into the guillotine opening or between the scissor blades.
 - Verify the position of the animal's head and ensure no obstructions (fingers, lab coat, etc) are present. Depress the guillotine blades quickly and smoothly, close scissor blades rapidly and firmly, or quickly force down the razor/scalpel blade, decapitating the animal. Be certain that the animal's head can be removed in one clean stroke.
- **Guillotine Maintenance**
 - After each decapitation, rinse and/or wipe down the guillotine and surrounding area to remove all blood and tissues.
 - At the end of each day of use, thoroughly wash the guillotine with detergent and water, and dry. Oil moving parts as necessary.
 - Sharpen or replace the blades whenever they are dull. Sharpening may be performed by passing a flat sharpening stone or file that is suitable for knife sharpening across the bevel of the blades a few times until they are sharp to the touch. Never hone the flat side of the blade.
 - **Precision Sharpening and Key Shop, 1510 SE Capital Circle, Tallahassee, FL, is available to sharpen blades on a fee for service basis. Precision Sharpening and Key Shop can be reached at 850-877-7297 or 850-556-7297.**
 - Record all dates of equipment maintenance, i.e., oiling, blade sharpening, in an equipment log that is maintained in the lab where the guillotine is used.

References

1. American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals: 2013 Edition. Retrieved from <https://www.avma.org/KB/Policies/Documents/euthanasia.pdf>

Revision History

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