WVU IACUC POLICY:
Prolonged Restraint of Animals

Purpose

This policy defines prolonged physical restraint and indicates circumstances where prolonged physical restraint may be used in non-sedated animals at WVU. This policy excludes restraint used for clinical purposes.

Physical Restraint is the use of manual, mechanical, or chemical (i.e., sedatives or tranquilizers) means to limit some or all of an animal’s normal movement for such purposes as examination, collection of samples, therapy, experimental manipulation and drug administration. Typically, animals are restrained for brief periods of time, usually minutes, in most research and teaching applications.

Prolonged Physical Restraint is defined by the WVU IACUC as physical restraint of a non-sedated animal for i) 30 minutes or longer in a natural position, ii) 10 minutes or longer in an unnatural position, or iii) any duration for any position (natural or unnatural) in which any part of the body is immobilized or partially immobilized.

A "natural position" is defined as a position that an animal normally engages in (e.g., any normal postural position for that species).

An "unnatural position" is one in which the particular animal species would not typically engage, assuming it is a healthy animal.

An “immobilized” body part is defined as any body part that is restrained in such a way that normal rotational movement of that part is not possible. An example would be the use of a head post for head stabilization during neurological testing procedures.

“Partial immobilization” is defined as the ability to move some body parts freely with immobilization of other body parts (e.g., hindlimb suspension).

Note: This definition is not intended to include the use of restraint devices such as a cat bag or a rodent conical restrainer for the purpose of blood collection for intervals less than 30 minutes.

Policy

Prolonged restraint should be avoided unless it is essential for achieving research objectives. Justification for prolonged restraint and consideration of alternatives must be provided in the protocol, amendment, or Standard Operating Procedure (SOP) and approval by the IACUC must be obtained before implementing such practices.

Procedure

Important guidelines to consider when writing an IACUC protocol, amendment or SOP for restraint of any duration:
1. Restraint devices CANNOT be considered normal methods of housing

2. When restraint devices are used, they must be specifically designed to accomplish research goals that are impossible or impractical to accomplish by other means or to prevent injury to animals or personnel.

3. Alternative systems that do not limit an animal's ability to engage in normal postural adjustments (e.g., subcutaneous implantation of osmotic minipumps in rodents) must be considered and used when compatible with research objectives.

4. Restraint devices may not be used simply as a convenience in handling or managing animals.

5. The period of restraint must be the minimum required to accomplish the research objectives.

6. The animal must be acclimated to the restraint device and laboratory environment prior to the procedure, and provided training, when appropriate, to adapt to the equipment and personnel.

7. Provision must be made for observation of the animal at appropriate intervals as defined in the protocol, amendment or SOP.

8. Veterinary care must be provided if lesions or illness associated with restraint are observed. The presence of lesions, illnesses, deleterious or maladaptive behavior or other behavioral changes may necessitate temporary or permanent removal of the animal from the restraint device. The animal may be removed from restraint at the discretion of the veterinary staff if deemed necessary.

9. Animals failing to adapt to the restraint may not be assigned to, or must be removed from, the study.

10. The purpose of the restraint and the duration of restraint must be clearly explained to all personnel involved in the study.

The protocol, amendment, or SOP must include:

1. A description of the restraint device.

2. Scientific justification, specific to the type of restraint proposed.

3. The estimated duration of the restraint with a maximum duration stated.

4. Monitoring procedures and methods used to minimize animal distress (e.g., acclimation to the device).

References