Restraint guidelines

Applications that include prolonged restraint are brought for full committee review. IACUC policies for approving the use of restraint procedures include a requirement for detailed scientific justification including compelling evidence for the lack of alternatives, including explanation why the study cannot be conducted under anesthesia. If deemed necessary by the IACUC the study is conducted under Veterinary Monitoring.

Restrain guidelines:

1. Restraint devices should not be considered a normal method of housing, and must be justified in the animal use protocol.

2. Restraint devices should not be used simply as a convenience in handling or managing animals.

3. Alternatives to physical restraint should be considered.

4. The period of restraint should be the minimum required to accomplish the research objectives.

5. Animals to be placed in restraint devices should be given training (with positive reinforcement) to adapt to the equipment and personnel.

6. Animals that fail to adapt should be removed from the study.

7. Provision should be made for observation of the animal at appropriate intervals, as determined by the IACUC.

8. Veterinary care must be provided if lesions or illnesses associated with restraint are observed. The presence of lesions, illness, or severe behavioral change often necessitates the temporary or permanent removal of the animal from restraint.

9. The purpose of the restraint and its duration should be clearly explained to personnel involved with the study.

Attention must be given to the possible development of lesions or illnesses associated with restraint, including contusions, decubital ulcers, dependant edema, anorexia, and weight loss. If these or other problems occur, prompt veterinary care must be provided. If, in the opinion of the attending veterinarian, the restraint is threatening the well-being of the animal, then the animal's welfare must take priority over continuation of the experiment.

Non human primates restraint and positive reinforcement

Primates in the laboratory may experience a plethora of potential stressors including physical and chemical restraint, venipuncture, injections, and participation in other husbandry routines such as being caught, cage change, and weighing. Training them to cooperate voluntarily, using positive reinforcement training techniques is one mean of significantly reducing the adverse impact of such procedures. Techniques that reduce or eliminate adverse effects not only benefit animal welfare but also can enhance the quality of scientific research because suffering in animals can result in physiological changes.

The following issues should be considered in all experimental and husbandry routines:

1. Methods of capture, handling, restraint and training should seek to minimize any stress to the animals.

2. Positive reinforcement techniques should be used to train primates to cooperate with capture, handling, restraint and research procedures. The routine use of squeeze-back cages should be avoided.

3. Where restraint is necessary, it should be for the shortest possible

time. Workshops in positive reinforcement are given routinely by

the EUPRIM.
http://www.euprim-net.eu/network/prt.htm#workshops

An article with many references to training protocols: PRESCOTT, M.J. BOWELL V.A and H.M. BUCHANAN-SMITH. Training laboratory-housed non-human primates, part 2: Resources for developing and implementing training programmes. Animal Technology and Welfare. December 2005 pp133-148.