Physical restraint

Physical restraint is the use of manual or mechanical means to limit an animal's normal movement. Restraint may be necessary for examining, collecting samples, drug administration, therapy, or experimental manipulation.

Animals might be restrained for brief periods, usually minutes, in many research applications. Prolonged restraint should be avoided unless it is essential for achieving research objectives, and it must be approved by the IACUC.

Alternatives to physical restraint should be considered. i.e., Systems that do not limit an animal's ability to make normal postural adjustments like implantation of osmotic minipumps, wireless recording systems, miniature microscopes, etc., should be used when compatible with protocol objectives.

The method of restraint chosen should minimize distress to the animal.

The restraint should be conducted by trained personnel aware of the purpose, the duration, and the criteria for early withdrawal of the procedure.

Restraint devices are used in order to accomplish research goals that are impossible or impractical to achieve by other means or to prevent injury to animals or personnel. Their usage must be justified in the animal use protocol. The period of restraint should be the minimum required to accomplish the research objectives.

Animals to be placed in restraint devices should be trained by using positive reinforcement to adapt to the equipment and personnel. Training protocol should be described in the IACUC application. Animals that fail to adapt should be removed from the study. The adaptation endpoint should be described in the application.

Animals must be closely monitored during the restriction. Monitoring means and specific criteria for early withdrawal should be determined in the IACUC protocol.

Veterinary care must be provided if lesions, illnesses behavioral changes associated with restraint are observed. The veterinarian should evaluate if temporary or permanent removal of the animal from the restraint is necessary.