Standard Operating Procedure

SOP Number: 02-18-5460
Service: Research
Operating Section: Surgery
Unit: CMF
Title: Chemical Restraint of Non-Human Primates

Purpose:
To describe methods of ensuring that safe and effective chemical restraint techniques are used and to provide for the humane handling of non-human primates.

There are problems associated with the repeated administration of ketamine to non-human primates, particularly when the animals are sedated several days consecutively. The following Standard Operating Procedure was developed to ensure the animals are treated humanely during all procedures involving chemical restraint, and that the animals remain on a regular feeding schedule. Attention to the needs and well-being of the animal before, during and after the procedures must be met.

Procedure:

1) PRE-SEDATION:
   a. A request to have food withheld from the animal must be submitted to the Comparative Medicine Facility 24 hours in advance or the procedures will not be allowed.
   b. The attending veterinarian or designee must approve repeated administrations of ketamine.
   c. If the animals are pair housed they must be separated prior to the administration of the anesthetic.
   d. Individual animal records will be checked for the correct dosage of ketamine. (recorded from prior uses.)
   e. To restrain a non-human primate for sedation, the animal to be sedated is gently squeezed to the front of the cage, taking care to avoid injury to the hands, feet and tail by the squeeze mechanism. Acceptable sites for IM injections are the caudal or cranial thigh muscles of the legs or the triceps muscle of the back of the upper arm.

2) POST-SEDATION:
   a) When the animal is completely sedated, all remaining food is removed from the cage so that the animal does not eat before completely awake.
   b) The animal is placed back into the cage in lateral recumbency with the squeeze back pulled forward and the animal is positioned so that the tracheal and nasal airways are not blocked.
   c) The person who administers the sedation to the primates is responsible for the entire experiment and must observe the animal (remain with the animal) until the animal has recovered sufficiently to retain normal posture. At this point, the squeeze mechanism can be pushed completely back and the animal must be fed.
   d) It is extremely important to allow sedated or anesthetized animals to fully recover from the effects of the sedative or anesthetic before reintroducing them into a pair housing...
situation. All animals should be carefully monitored to assure that all paired animals have reestablished stable social interactions.

e) If the research staff is unable to remain with the animal until fully awake, alternative arrangements **must** be made with the Comparative Medicine Facility. The veterinary staff will monitor the animal's recovery at a charge to the Principal Investigator.

**OFFICE USE ONLY:**

<table>
<thead>
<tr>
<th>APPROVALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Official</td>
</tr>
<tr>
<td>QA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Version</th>
<th>Effective Date</th>
<th>Supersedes</th>
<th>Original Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2</td>
<td></td>
<td>#1</td>
<td>12/17/01</td>
</tr>
</tbody>
</table>