Use of Sedatives, Analgesics, and Anesthesia Research Animals

Policy Statement

Animals experiencing more than momentary or slight pain or distress require appropriate sedation, analgesia, or anesthesia unless suitable, scientific justification is provided. Assessment of pain and distress in animals can be challenging. Thus, procedures that cause pain or distress in humans should be assumed to cause similar effects in animals, unless it has been proven otherwise. The Attending Veterinarian is responsible for ensuring that adequate sedation, analgesia, or anesthesia is provided. Anesthesia vaporizers must undergo full service and certification at least once every three years.

Reason for Policy
The IACUC has ultimate responsibility for ensuring that pain and distress in research animals is limited to that which is necessary in the course of approved experimentation. This includes review and approval of methods and agents used for prevention and alleviation of pain and distress. A pain scale must be submitted with the protocol for all procedures that involve subjecting animals to more than momentary or slight pain or distress. Committee decisions will be based on regulatory requirements as well as advice from the veterinary staff and the Investigator. The IACUC will periodically review (at least every three years) protocols that involve pain or distress. The review will specifically assess methods and agents being used and any deviation from this Policy. The IACUC has the responsibility to verify that anesthesia vaporizers used in animal research are fully serviced and certified at least once every three years.

Procedures

Role of the Investigator

When animals experience more than momentary or slight pain or distress, the Investigator must provide in the animal care and use protocol a detailed description of how pain or distress will be assessed and how agents will be used to alleviate pain and distress. To meet this requirement, PIs are to use a pain scale that objectively assesses pain and provides precise instruction regarding analgesic use and euthanasia. A pain scale template is included in the protocol form, which should be modified by the Investigator to meet the needs of the specific project. When animals are subjected to major survival surgery, post-surgical analgesia is usually required. If the Investigator seeks to withhold sedatives, analgesics, or anesthetics, or asks to deviate from the recommendations of the veterinary staff, the PI must provide the IACUC with scientific justification for consideration. Justification should include the rationale or evidence that demonstrates how agents would compromise the scientific aspects of the study. Investigators are highly encouraged to consult with veterinary staff during protocol planning and to reach an agreement about the appropriate use of drugs for controlling pain and distress. It is the Investigator’s responsibility to have the anesthetic vaporizers fully serviced and certified for use.

Role of the Laboratory Animal Resources (LAR) and Clinical Veterinary Staff

The proposed methods and use of agents to prevent or alleviate pain or distress in experimental animals must have the approval of the veterinary staff. The LAR veterinary staff will review animal care and use protocols to determine if proposed methods and agents for anesthesia and analgesia are appropriate. The veterinarians consult with Investigators as needed, to determine appropriate treatments that meet the clinical needs of the animals, while not compromising the scientific integrity of the experiments.

In the event of unanticipated pain or distress that is protocol-associated or arises from spontaneous illness or injury, the Clinical Veterinarian is responsible for determining the cause of pain and then establishing ameliorative therapy consistent with established veterinary medical and nursing procedures. The Attending Veterinarian has authority to make independent emergency decisions concerning the treatment regimen of animals experiencing unalleviated
pain or suffering. This authority is delegated to Clinical Veterinarians overseeing the animals under the IUB Animal Care and Use Program. These animals must be provided with appropriate veterinary care or be humanely euthanized, unless an exception has been justified within an IACUC approved protocol.

Every effort will be made to consult with the Investigator prior to initiating treatment or euthanasia. However, the welfare of the animal will be the primary consideration in all cases.

Furthermore, LAR can assist an Investigator with identifying qualified resources to service and certify anesthesia vaporizers.

Sanctions

Failure to comply with IACUC policies may result in noncompliance reports to the Institutional Official, the Office of Laboratory Animal Welfare (OLAW), the U. S. Department of Agriculture (USDA), and/or the suspension of animal use privileges. In addition, the availability of sponsored research funds may be affected when an Investigator is found to be in violation of these policies.

Forms

The pain scale is found within the Animal Care and Use Protocol (BIACUC) Protocol form: https://research.iu.edu/doc/compliance/animal-care/bloomington/iub-biacuc-protocol-application-form.docx

Contacts

<table>
<thead>
<tr>
<th>Subject</th>
<th>Contact</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaporizer certification</td>
<td>Laboratory Animal Resources</td>
<td>855-2356</td>
<td><a href="mailto:lar@indiana.edu">lar@indiana.edu</a></td>
</tr>
<tr>
<td>Policy</td>
<td>IACUC Administrator</td>
<td>855-5138</td>
<td><a href="mailto:biacuc@indiana.edu">biacuc@indiana.edu</a></td>
</tr>
</tbody>
</table>

Web Address for this Policy

https://research.iu.edu/policies/bloomington-animal-care-and-use.html

Related Information
Surgery – General Policy:


LAR Drug Formularies, Anesthesia:

https://lar.indiana.edu/doc/Anesthesia_and_Analgesia_in_Research_Animals.pdf