



DEPARTMENT OF HEALTH & HUMAN SERVICES

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Office of Laboratory Animal Welfare  
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Home Page: <http://grants.nih.gov/grants/olaw/olaw.htm>

FOR EXPRESS MAIL:

Office of Laboratory Animal Welfare  
6700B Rockledge Drive, Suite 2500  
Bethesda, Maryland 20817  
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October 15, 2020

Re: Animal Welfare Assurance  
A3031-01 [OLAW Case 1D]

Dr. Andrew Weyrich  
Vice President for Research  
University of Utah  
201 S. Presidents Circle  
Salt Lake City, UT 84112

Dear Dr. Weyrich

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your October 6, 2020 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Utah. According to the information supplied, OLAW understands that on September 17, 2020 a Principal Investigator, who is also the IACUC Chair, notified the IACUC of a potential serious adverse event involving a canine. It is further understood that to avoid conflict of interest, the IACUC Chair was not involved in the review of the incident.

On September 16, 2020 a fentanyl patch was placed on a dog the day prior to a thoracotomy procedure. The study was completed successfully. The following morning, personnel noted that the animal seemed to be in pain and was reluctant to move. Upon further investigation, they noted that the fentanyl patch was missing. Study personnel did not notice that the fentanyl patch was missing when the animal was taken for surgery. The patch was found in the run that the dog was taken from prior to the surgery, indicating that the patch had not been in place overnight. The dog was then administered buprenorphine and carprofen and the fentanyl patch was replaced. The dog had been given bupivacaine injections at the local incision sites which may have alleviated some pain. The study was funded by the PHS. The Principal Investigator was requested to report this to the agency that is funding this research.

During a convened meeting of the IACUC, the committee reviewed and discussed the details of the event as provided by the Principal Investigator (IACUC Chair). The Principal Investigator removed himself from the meeting, the discussion, and the vote.

Corrective and preventive actions included the study personnel being more vigilant in verifying that the fentanyl patch is in place prior to and following surgical procedures. Verification of the fentanyl patch placement will be recorded at the beginning of each study (on the anesthesia monitoring record) and on the post-procedure monitoring record and will be time stamped and initialed to verify that it is intact. In addition, the Office of Comparative Medicine staff will also verify patch placement of animals either the morning of surgery or with the laboratory team at the time of transport from the animal facility. The laboratory personnel must receive additional training and guidance from the Comparative Medicine Center (CMC) veterinary staff by way of CMC involvement in the study procedures. The CMC staff must provide anesthesia monitoring and management during the training period and/or until the Clinical Veterinarian is confident that proper animal management can be achieved. Going forward, the Clinical Veterinarian must be contacted to provide veterinary support if personnel are unsure of any circumstance in which the well-being of the animal is in question. This study will undergo additional post-procedure monitoring.

The prompt consideration of this matter by the University of Utah was consistent with the philosophy of institutional self-regulation. Similarly, the actions taken to resolve the issues and prevent recurrence were appropriate. We agree that notifying the funding component and the USDA is appropriate. We find no cause for further action by this office at this time.

Sincerely,

Brent C. Morse, DVM  
Director  
Division of Compliance Oversight  
Office of Laboratory Animal Welfare

cc: IACUC contact  
Dr. Robert M. Gibbens, USDA, APHIS, AC

**From:** (b) (6) on behalf of [Andrew S Weyrich](#)  
**To:** [morseb@mail.nih.gov](mailto:morseb@mail.nih.gov)  
**Cc:** [jack@ocm.utah.edu](mailto:jack@ocm.utah.edu); [Amanda Flitton](#); [Gibbens, Robert - APHIS](#)  
**Subject:** Event Notification - Protocol 20-05010  
**Date:** Wednesday, October 7, 2020 10:46:44 AM  
**Attachments:** [20-05010 Dosdall OLAW Letter 06OCT20.pdf](#)

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Dear Dr. Morse,

Under provision of IV.F.3 of the Animal Welfare Assurance Policy and as the Institutional Officer at the University of Utah (U of U), I am providing OLAW and USDA with a full explanation of circumstances in regard to an adverse event for protocol 20-05010. I have attached the summary letter in this email.

The Principal Investigator was also requested to report this to the agency that is funding this research.

Please let me know if you need additional information.

Thank you,

**Andrew S. Weyrich, Ph.D.**

Vice President for Research  
Professor of Internal Medicine  
The University of Utah

P: (b) (6)

Please contact (b) (6) for scheduling requests (including events and presentations)

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October 6, 2020

Brent C. Morse, DVM  
Department of Health and Human Services  
Rockledge, Suite 360, MSC 7982  
6705 Rockledge Drive  
Bethesda, MD 20892-7982

Dear Dr. Morse,

Under provision of IV.F.3 of the Animal Welfare Assurance Policy and as the Institutional Officer at the University of Utah (U of U), I am providing OLAW with a full explanation of circumstances in regard to an adverse event.

Name of Institution: University of Utah  
Assurance Number: A3031-01

The Principal Investigator notified the IACUC of a potential serious adverse event via an Event Notification form concerning the below mentioned protocol on September 17, 2020. The Principal Investigator is the IACUC Chair. To avoid conflict of interest, the IACUC Chair was not involved in the event review process. The IACUC Director notified the Institutional Veterinarian of the potential adverse event on September 27, 2020. It was discussed that this event would be reviewed at the next convened IACUC meeting on September 30, 2020.

The following is a summary of the adverse event:

1. Protocol number: 20-05010
2. Protocol title: Pacing of the Cardiac Conduction System for Cardiac Arrhythmias
3. Funding agency: NIH, NIH HL
4. Animal species: Dog
5. Age of animal(s): approximately 1.5 years
6. Number of animals involved in the event: 1
7. Date(s) that the event occurred: September 16, 2020
8. Overview of the adverse event (as provided by the Principal Investigator):  
*The dog was fasted and a fentanyl patch was placed the day prior to a study by CMC personnel. On the study day, the dog was transported to CVRTI for a thoracotomy procedure by study personnel. My technician and myself saw the location where the fentanyl patch was to be placed and thought that we saw that it was in place, however, we were later informed that the patch was missing and some of the adhesive was still in place. The study was completed successfully and the animal was returned to CMC and was ambulatory and eating. The following morning, CMC personnel noted that the animal seemed to be in pain and was reluctant to move. Upon further investigation, they noted that the fentanyl patch was missing with only a part of the adhesive and tegaderm adhesive in place. The patch was found in the dog run that she was taken from prior to the surgery, indicating that the patch had not been in place overnight. CMC personnel administered buprenorphine and carprofen shots and replaced the fentanyl patch.*
9. Was there inadvertent pain involved in the adverse event (more than momentary)?:  
*Probably some pain overnight. The dog was given bupivacaine injections at the local incision sites which may have alleviated some pain, but the effect may have worn off by the next morning when CMC personnel inspected the animal.*

10. Describe the corrective actions to avoid future problems:

*Study personnel will be more vigilant in verifying that the fentanyl patch is in place prior to and following surgical procedures. Verification of the fentanyl patch placement will be recorded at the beginning of each study (on the anesthesia monitoring record) and on the post-procedure monitoring record and will be time stamped and initialed to verify that it is intact.*

11. Provide a conclusion:

*Study personnel did not notice that the fentanyl patch was missing when the animal was taken for surgery, resulting in some pain overnight. Study personnel will make verification of the fentanyl patch at the beginning of the study and prior to leaving the animal at the end of the study a standard part of our anesthesia monitoring and post-study recovery sheet recordings. This will be part of the written record that will be returned with the animal to CMC.*

On September 30, 2020 the Principal Investigator (also the IACUC Chair) provided a summary of the potential adverse event dated September 17, 2020 to the committee during a convened meeting. The Principal Investigator (IACUC Chair) removed himself from the meeting, the discussion, and the vote. The committee reviewed and discussed the details of the event as provided by the Principal Investigator (IACUC Chair) as written above. In addition, the Clinical Veterinarians informed the committee that the Office of Comparative Medicine staff will also verify patch placement of animals either the morning of surgery or with the laboratory team at the time of transport from the animal facility.

The IACUC further discussed the corrective actions proposed by the Principal Investigator and require the following additional actions to be implemented immediately.

1. The laboratory personnel must receive additional training and guidance from the Comparative Medicine Center (CMC) veterinary staff by way of CMC involvement in the study procedures. The CMC staff must provide anesthesia monitoring and management during the training period and/or until the Clinical Veterinarian is confident that proper animal management can be achieved.
2. Going forward, the Clinical Veterinarian must be contacted to provide veterinary support if personnel are unsure of any circumstance in which the well-being of the animal is in question (e.g. whether or not the Fentanyl patch is intact).

During COVID-19, adjustments have been made to the post-approval monitoring program. Post-approval monitoring has continued electronically (electronic review of the approved protocol, training, etc.) and via correspondence with Principal Investigators (email or telephone) during this time. In-person post-approval monitoring is deemed necessary when feasible during the Institution's COVID-19 restrictions. The IACUC discussed and determined that this study should undergo additional post-procedure monitoring.

The committee discussed and determined that the animal will be reported on the USDA Annual Report under column E (unalleviated pain) since the animal was observed experiencing signs of pain (reluctant to move) as determined by the Clinical Veterinarian.

The committee determined that this was a serious adverse event resulting from an inadvertent unfortunate oversight and that the event should be reported to the Office of Laboratory Animal Welfare (OLAW) and USDA. The committee voted unanimously to report the adverse event and to report this animal under column E on the USDA Annual Report.

In conclusion, the committee discussed and determined that this is a serious adverse event and will be reported to the regulatory agency of the Office of Laboratory Animal Welfare (OLAW) and USDA since it is federally funded. In addition, the animal will be reported under column E on the USDA Annual Report. The Principal Investigator was requested to report this to the agency that is funding this research.

The IACUC Director met with the Institutional Official on October 6, 2020 and determined that the corrective actions presented by the Principal Investigator and additional corrective actions required by the IACUC were adequate.

Sincerely,

(b) (6)

Andrew Weyrich, Ph.D.  
Vice President for Research  
Institutional Official

cc. Robert Gibbens, DVM  
Director, Animal Welfare Operations  
USDA-APHIS-AC

Jack Taylor, DVM, Ph.D.  
Institutional Veterinarian

Amanda Flitton  
Interim IACUC Director

U of U IACUC Office Files