



THE UNIVERSITY
of
WISCONSIN
MADISON

Medical School Special Meeting
October 30, 2003

*minutes
emailed
to Cole on
12.2.03*

Present: Basso, Boehm (n.v.), Croft (n.v.), Drezner, Gallardo (n.v.), Jensen, Jarvis, Lyons, Margolies, Moser, and Southard

Guests: Dr. Annette Gendron, Dr. Tom Yin

Dr. Moser explained that we changed the agenda for the special meeting for two reasons:

- 1) The ACUC did not complete all of the inspections and won't until after November 10th. We will not do the Semiannual Program review until after all of the inspections have been completed.
- 2) There have been unexpected health problems/deaths in four monkeys on Dr. [REDACTED] protocol over the last four months. Dr. [REDACTED] wanted the committee to be informed of the problems. Since Dr. [REDACTED] will not be available for the November 10th ACUC meeting and Dr. Moser did not want to wait until the December ACUC meeting, Dr. [REDACTED] decided to take advantage of the already scheduled meeting time to discuss the animals.

Dr. [REDACTED], pathologist at RARC, was asked to attend the meeting to explain the necropsy reports that have been generated and to offer her expertise during the discussion of the animals.

Dr. [REDACTED] noted that it would be best if the ACUC discuss each of the four animals separately, in the order in which incidents occurred. Before the discussion of the animals, Dr. [REDACTED] was asked to explain her two surgical procedures. She does eye coil implants (considered minor surgery) and she does headcap implants (considered major surgery).

Animal 1 [REDACTED]

Dr. [REDACTED] summarized - [REDACTED] had headcap for three years. His headcap broke during routine cleaning. Dr. [REDACTED] immediately anesthetized him and took him up for surgery in the [REDACTED] surgery suite to reattach the headcap. He never recovered from surgery.

Dr. [REDACTED] added that the animal had lost blood, was dehydrated and needed an IV line. A catheter and Ringer's Solution were not available to her. The needed supplies may have been in the locked supply cabinet, but Dr. [REDACTED] does not have access to the cabinet.

The committee discussed the importance of requiring investigators to add to their protocols the contingency plan for headcap repairs or other potential complications. This request would only be for protocols that include procedures that have a higher potential for complications (headcap implants, eye

Research Animal Resources Center

396 Enzyme Institute University of Wisconsin-Madison 1710 University Avenue Madison, Wisconsin 53726-4087
608/262-1228 Fax: 608/265-2698 Email: help@rarc.wisc.edu http://www.rarc.wisc.edu

oil implants, etc.). The committee also discussed the importance of having supplies and a suitable facility available to investigators for emergencies.

Dr. [REDACTED] explained that we do not have a necropsy report for this animal, only Dr. [REDACTED] report. Dr. [REDACTED] was the veterinarian present for the surgery. She felt that giving fluids was contraindicated, as she believed the animal had pulmonary edema. We don't have any information about why Dr. [REDACTED] believed the animal had pulmonary edema.

The committee discussed that all animals should have a necropsy done when they die or need to be euthanized because they are sick. Dr. [REDACTED] explained that investigators can still recover any tissues they need even if a necropsy is done. It is her policy to work closely with investigators to ensure that they get what they need before, during or after the necropsy. She explained that necropsies can be extremely helpful to investigators because many times the cause of death/illness is not what the investigator expected. Also, necropsies can help determine how future complications can be avoided or treated.

The committee discussed at length the need to have qualified personnel immediately available for emergencies/repairs, etc. Dr. [REDACTED] noted that there are a lot of highly qualified veterinarians on this campus. Needed supplies must also be immediately available for emergencies. Dr. [REDACTED] suggested that when investigators call the veterinarians regarding an emergency, the veterinarian could give the combination for the locked cabinet to the investigator needing emergency supplies. After the emergency has passed, the combination lock could be changed.

The committee should inform PIs that the ACUC will require that "likely complications" be addressed in the protocol (e.g., headcap repairs, ureter repairs, etc.).

Despite the urgency of a situation, a phone consultation with a vet is required before trying to do any procedure not described in a protocol. There are eight veterinarians available on campus and all wear pagers. It seems that a vet would always be available, for a least a phone consultation, for emergency situations.

Dr. [REDACTED] noted that she will amend her protocol to add that she will replace/repair headcaps, if needed. She already has statement in her protocol saying she will contact veterinarian when there is an emergency.

Dr. Southard summarized the two issues that he felt need to be addressed by the ACUC -

- *Are we able to provide Dr. [REDACTED] with the veterinary care she needs to do her research?
- *Is there something inherent in Dr. [REDACTED] protocol that is causing the health problems?

Dr. [REDACTED] explained that she has been doing these procedures for 10 years and has never had any complications, until this summer.

Animal 2 - [REDACTED]

Dr. [REDACTED] summarized - at the end of July, beginning of August, lab staff noted that [REDACTED] seemed to have neurological problems. Dr. [REDACTED] believed that he had an intracranial bleed. He was

reated with dexamethasone and an antibiotic. The animal proceeded to get worse and eventually it died (08/23/03). Dr. ██████ did a necropsy on the animal. She explained that animal had an abscess in right frontal lobe. Dr. ██████ noted that there was a longer screw coming through the skull penetrating the dura. This may or may not have caused the abscess.

Dr. ██████ suggested that if the dura is compromised in any way during surgery (evidenced by fluid leakage), they should start aggressive antibiotic treatment immediately.

Dr. ██████ suggested that a CT scan be done before surgery to determine optimal screw length. It was mentioned that because a portion of the skull is removed during surgery that this piece of skull could also provide that information.

Dr. ██████ suggested that animals routinely be started on antibiotics that are know to cross the blood-brain barrier 24 hours before surgery and continue for at least 48 hours after surgery. Currently animals are treated with Cefazolin before and after surgery. This antibiotic does not cross the blood-brain barrier.

Animal 3 - ██████

Dr. ██████ summarized - ██████ showed signs of neurological problems about one week after surgery. A CT scan and MRI confirmed that there was an abscess. The images showed clearly that there was a longer screw penetrating the dura. He was euthanized after the diagnosis. No necropsy was done.

The value of the CT scan following the surgery was discussed and it was agreed that it would be valuable to determine whether the screw placement was appropriate.

Animal 4 - ██████

Dr. ██████ summarized - ██████ was being transported from ██████ to ██████ for eye coil repair. His cage was clearly marked for no food in the morning, but he was fed by the animal care staff. He was anesthetized with Ketamine and diazepam and placed in transport cage. When he arrived at ██████, he was dead and attempts to revive him were unsuccessful.

Dr. ██████ explained that necropsy showed that the animal died of hypoxia from airway obstruction, but there was no evidence that he had aspirated food. There was cerebral edema, but seemed clear that it was caused by airway obstruction and was not an ongoing problem. Necropsy showed that screws had not penetrated the dura. This animal had an amputated tongue and food in one cheek pouch. No traces of food were found in trachea or esophagus.

Dr. ██████ suggested that in the future diazepam should not be used during animal transport as it prevents a gag reflex and it causes limpness. The question of transporting the animals unanesthetized was discussed and a method for doing so has been worked out by Dr. ██████ in conjunction with the vets and ██████ personnel.

Dr. ██████ noted that she has now invested in monitoring equipment to assess her animals and will transport them awake. When asked what she would like from ██████ in order to help her do her research, Dr. ██████ said she would like it if ██████ had a fully equipped surgery facility and veterinarian at

██████████ She feels that it would be very worthwhile to have a veterinarian over there to monitor daily all of the compromised animals housed there.

The committee still has to wait for Dr. ██████████ report before we can determine if adequate veterinary care is available for Dr. ██████████ animals. The report should be available next week.

The committee discussed possible changes that could be made to the protocol:

- *Q#29 - All animals will have CT scan after surgery to determine if the dura was compromised.
- *Q#27 - An appropriate antibiotic that crosses the blood/brain barrier, will be routinely used 24-48 hours before surgery and 3-14 days after surgery depending on need, in consultation with vet.
- *Q#8 - Will transport animals while they are awake.
- *Q#29 - Clinical assessments will be done daily. If abnormal, CT scan will be done.

When an amendment is submitted in the future addressing the suggestions, it will be handled via "designed review."

Neurologists at the Vet School have agreed to serve as consultants for the ██████████ vet staff when there are potential neurological problems.

The committee discussed whether or not all investigators implanting headcaps need to alter their protocols. A CT scan might not be necessary; clinical evaluations may be all that is necessary. Dr. Southard expressed that this is a specific protocol issue because recently there were four animals with problems. Other investigators should not be asked to add the suggestions to their protocols unless they have problems.

The committee feels strongly that investigators must have necropsies done when vets feel it would be helpful. Pathologists will work with investigators to ensure that they get the tissues they need. ██████████ will pay for the necropsies.

A memo should be sent to all investigators informing them that when vets say a necropsy should be done, a necropsy must be done. ██████████ will be covering associated costs. Investigators can still get their needed tissues.

*Approved at Medical School
ACVC on December 1, 2003.*

Sandra Boehm
Sandra Boehm
Assoc. Admin. Prog. Spec.