

January 22, 2015

Dear Ms. Warner and family,

On behalf of the staff, students, and clinicians who worked with Lance while he was at the NC State Veterinary Hospital let me again express our condolences to you for your loss.

As per our phone conversation on January 19, 2015, I have attached the review committee's findings.

I will be contacting Dr. Honaker and discussing the review committee's findings. I have also requested that a copy of the medical records be sent to you from our medical records department.

The recommendations mentioned in the report have already been initiated. In addition, the committee has suggested the total bill of \$2200 be refunded.

Again, I am very sorry for your loss of Lance and if I can provide any additional assistance please do not hesitate to contact me.

Sincerely,



Steven L. Marks, BVSc, MS, MRCVS, DACVIM (SAIM)

Case Review: Lance Warner

Case Review Committee: Drs. Bruce Keene (Cardiologist), Alessio Vigani (Anesthesia and Emergency and Critical Care) and Shelly Vaden (Small Animal Internal Medicine)

Lance Warner was a 13-year-old Afghan hound that was presented by Ms. Warner for evaluation of nasal discharge. He underwent routine evaluation for the discharge, including rhinoscopy. Unfortunately he died the night following this procedure. The exact cause of death could not be determined and a necropsy was not allowed.

The Warners requested the review because they are still looking for answers regarding what happened up to the point of death and what was the cause of death. They feel like a step was missed somewhere during the process. They are concerned that he was not monitored, as he should have been. Additional concerns were raised in a letter dated November 17, 2014 from Lorri Warner (Ms. Warner's daughter), including being seen with Lance in an exam room that was marked "Do Not Use" and having observed the ICU staff watching college basketball playoffs while their other dog (Clarke) was hospitalized in February 2014.

The committee members, as well as the internal medicine service, were all saddened by the death of this patient. This is truly a routine procedure with a low complication rate. Although impossible to say with certainty, we believe the cause of death was aspiration, of blood or a blood clot.

One of the review members (Vaden) was present near the end of the rhinoscopy. It was clear to her that this was an excessive amount of bleeding. The resident overseeing the care of Lance (Dr. Greene) instituted appropriate monitoring parameters for a dog that had excessive bleeding and placed Lance in Intermediate Care, which was appropriate for the monitoring he required. Orders were written to call Dr. Greene if Lance had excessive bleeding, if his respiratory rate was below 10/min or above 40/min or if dyspnea was observed. During the night (2:00 a.m.) his respiratory rate and temperature increased albeit below 40/min. Dr. Greene was called and ordered an IV and antibiotics (Unasyn) suspecting that the rise in temperature was a fever. At 2:45 a.m., his respiratory effort increased and the intern on duty was paged. He remained hemodynamically stable. At 4:00 a.m., he had vomited a black substance and had black diarrhea (presumed to be digested blood). Lance was transferred to ICU around 5 a.m. but was already dying at that point.

The review committee believes that at 2:45 a.m., more could have been done to assess and manage the situation. Specifically, an arterial blood gas and continuous ECG were warranted, as was transfer to ICU. If moved to ICU earlier, the opportunity to place Lance on a ventilator would have been available. However the review committee would like to emphasize that there is no way of knowing if these changes would have kept Lance from dying. It is quite possible he would have still died from what appears to be aspiration even if placed on a ventilator.

The suggestions from the committee are as follows:

1. Establish guidelines for a standard response to bleeding post-rhinotomy, including appropriate treatments and location where the animal should be housed after the procedure. A committee has been formed to proceed with this task.
2. Because the residents cannot be expected to be able to respond to the needs of their patients at all hours of the day and night, the availability of doctors for afterhours case supervision of animals in ICU, and when needed IMC, needs to be at the highest level possible.
3. We need to make certain that the image we portray to our clients is one that promotes their trust in us rather than diminishes it. The observation of the ICU staff watching the basketball playoffs during the time when their other animal was hospitalized created the first seed of doubt regarding level of supervision that animals were receiving while in our care. Bringing Lance into a room marked "Do Not Use" increased that doubt.