A15: Current Animal Research Topics: Doing Right by the Animals to Serve Veterans *(A Conversation With …* Track)

PRIM&R 2015 IACUC Conference

What is VVC? And When Does it Come into Play? (Scenario for presentation by Alice Huang)

Dr. Zauberfinger is performing a surgical procedure on a rat, and everything is proceeding smoothly, exactly as described in the protocol that was approved by the IACUC. He has just taken a biopsy, which has been sent to his laboratory for examination, and is waiting for confirmation that the sample contains the histological areas of interest before continuing with the surgery. The confirmation typically takes 5-10 minutes, so he takes the opportunity to double-check the level of anesthesia, and injects a small supplementary dose of the approved ketamine/xylazine rodent cocktail. At 20 minutes, he gets word that there’s a problem with the microscope in the lab, and his technician is changing a part, but expects to have results for him in 10 more minutes. Dr. Zauberfinger administers another small supplementary dose of ketamine/xylazine, according to the protocol, which was wisely written to allow adjustments of the doses and frequency of administration “as necessary to maintain an appropriate level of surgical anesthesia”. Forty minutes after sending the biopsy off to the lab, he learns that the microscope is still not functional, and efforts are now being made to find another microscope to use. He is reluctant to give yet another supplementary dose of injectable anesthetic, but is concerned that the level of anesthesia is likely to become too light before he will be able to finish the procedure, so he asks his assistant to contact the veterinarian, Dr. Tierartzt. Fortunately, Dr. Tierartzt answers the call immediately and agrees that administering more ketamine is likely to result in delayed recovery from anesthesia. He directs Dr. Zauberfinger to switch to isoflurane anesthesia, administered by nose cone.

Can Dr. Zauberfinger do this, given that his IACUC-approved protocol makes no mention of using isoflurane?

What if Dr. Zauberfinger wants to be able to switch to isoflurane during future procedures on this protocol, and is concerned that the veterinarian might not be available every time when the decision is to be made?

What if the IACUC decides that this is generally a good option to allow for most protocols?