If a researcher disagrees with a veterinarian’s recommendations, whose say goes?

The veterinarian added that the multimodal analgesia being recommended would bring Boyd’s protocol in line with similar protocols now used with monkeys at Great Eastern and would be consistent with standard practice used at several primate centers and universities. Boyd resubmitted his protocol without the recommended additional analgescics and without indicating if there was any scientific rationale for avoiding the NSAIDs or nerve block, such as interference with his data. However, he did write that he believed the additional drugs were unnecessary because his animals always looked good the morning after surgery, consistent with what would be expected after a long procedure. And, he added, the procedure itself was little more than a skin incision, some muscle dissection, and fixing the apparatus to the skull. He claimed that the Guide for the Care and Use of Laboratory Animals and the Animal Welfare Act’s regulations did not require multimodal analgesia, and that the veterinarian’s role was limited to consultation and advisement. Although the IACUC had approved multimodal analgesic treatment in other primate protocols, it agreed that it should not force an investigator to follow a veterinarian’s recommendations. After a full-committee discussion, the protocol was approved as resubmitted by Boyd.

What is your opinion of the IACUC’s actions?

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IACUC fails to remember veterinarian as SME

The IACUC cannot simply state they “agree that it should not force an investigator to follow a veterinarian’s recommendations,” as it is the job of the attending veterinarian (AV) to ensure the appropriate use of analgesics. The AV is the Subject Matter Expert (SME) on appropriate analgesics in postsurgical animals. Although the veterinarian did not make a strong argument for changing the analgesic protocol, as stating “other protocols are doing this” is not a justification for changing this particular one, it is a reason to discuss the potential changes; Boyd should have acknowledged this. The veterinarians’ proposal would have been stronger had they referenced historical assessment of Boyd’s post-op animals as well as current methods—their approach is a refinement of analgesia and one that the IACUC should have considered more seriously.

Boyd’s assessment of his post-op animals is based on observations collected on the following morning and says nothing about the immediate post-operative period—the period of time between recovery from anesthesia and the next morning, which could be anywhere from 12–18 hours after the administration of analgesic—and his statement about previous pain control being sufficient has not been adequately proven. The veterinarians’ suggestions for a local nerve block, which provides immediate pain control up to several hours post-op, and NSAID, which provides for reduction in inflammation as well as swelling associated with surgical trauma, would be a welcome adjunct to an opioid analgesic. In fact, our personal experience has been that NSAIDs reduce the need to use a controlled substance such as buprenorphine. In other words, the proposed changes in analgesia, as suggested by the AV, would benefit Boyd’s post-operative care and potentially improve the well-being of his research animals. Had he done his due diligence in searching the literature, he might have discovered this. Boyd failed to justify the refusal upon scientific grounds, which should have been reason for the IACUC to deny his proposal.

The IACUC may require that Boyd do further research into appropriate pain control as this area has been evolving. What worked in the past isn’t always appropriate. Without scientific data that supports his resistance to change, Boyd cannot justify his analgesic regimen, particularly as other institutions develop further refinements that need to be assessed with respect to his own research.

In an ideal situation, both Boyd and the IACUC could have discussed the researcher’s needs and historical assessment of the nonhuman primates, with a greater understanding of the timing around post-operative assessments and how they relate to the analgesics used. They could have also accepted the changes in current analgesic treatments, and even added the recommended analgesics as alternatives in situations where animals were noted to be potentially in pain or distress, so those analgesics could be used without having to wait for approval.

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1. 9 CFR Part 2 § 2.31 Institutional Animal Care and Use Committee (d)(1)(A) and (B)
2. 9 CFR Part 2 § 2.33 Attending Veterinarian (b) (4)
Embracing change

We've all had to deal with change at some point in our lives and it takes time to acclimate to the way new things unfold. I'm sure that is the case for Boyd. He is comfortable, accustomed with the way his research has been running. When we talk about life forms, however, it is wise to embrace change.

Boyd is correct when he says that the veterinarian's role is to advise and consult, but the veterinarian is not limited to that. The veterinarian is responsible for the welfare of the animal and should exercise his/her professional judgement in that regard. In general animal practice, veterinarians' use only the most current medical and nursing procedures—why not use these standards for our research animals? Analyzing pain is subjective, and as such a multi-modal approach to subside or even eliminate the pain is imperative.

I would have to say I am disappointed in the IACUC’s decision. I agree, it is not by force that we change someone’s opinion, but if we are not the animals' advocate, why are we even here?

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6. 9 C.F.R. § 2.31(d)(11)(i)(B)
7. 9 C.F.R. § 2.31(d)(11)(i)(B)
8. 9 C.F.R. § 2.33(b)(4)
9. 9 C.F.R. § 2.33(a)(2)
10. 9 C.F.R. § 2.33(a)(3)
11. 9 C.F.R. § 2.33(c)(6)
Less than full analgesia can leave significant pain under-treated

The IACUC made a poor decision in this scenario. The decision may not be compliant with regulations and needlessly puts the monkeys at risk of pain and suffering beyond that necessary to obtain quality data.

Given the challenges of accurately diagnosing minute-by-minute pain in monkeys, and the reality that the monkeys cannot self-medicate, all should err on the side of presuming pain and maximizing safe use of analgesics. All available guidance presumes leadership and judgment of veterinarians, who should be current in their field and actively involved with the animals. This standard of care to treat preemptively with multimodal analgesia is not isolated to GEU’s veterinarians—it is included in the Guide and in guidance from professional veterinary groups. IACUCs follow a principle by which we assume what is painful to humans may be painful to animals; a corollary is that effective pain management for humans may be a helpful guide for animal pain management.

The standard of care for comparable major survival surgeries in humans includes multimodal pain management strategies, not just intermittent boluses of mid-potency opioids. True, the Animal Welfare Act does not specify that investigators must follow the veterinarian’s consultation. But the committee has approved a lower level of pain management than current veterinary standards promote. This puts the monkeys at risk of more than minor pain, with no scientific justification for compromising their welfare. It may violate the “adequate post-procedural care” provision of mandated adequate veterinary care, and raises questions about the investigator’s training to provide proper post-procedure care and proper use of analgesics. If meeting minutes accurately reflect the consultation and deliberations, the USDA inspector should scrutinize this issue closely. The approved practice would not put the animals into Column E of the annual report, as that is only appropriate when the analgesics are suspected to interfere with data—not when IACUC and investigators allow what looks like under-treatment of pain for other reasons.

Faced with the investigator’s vague assertions about how the animals look and without veterinary evaluation of the animals (at least, not in this scenario), the committee could mitigate its bad decision by requiring that the veterinarians and investigator develop a proper pain scoring system and compare multimodal analgesia to buprenorphine-only analgesia. Published clinical pain management data on monkeys are scarce. The GEU people could quantify measures such as time to reach for treats where monkeys must work for them, food and water consumption, postures and facial expressions. Human presence can affect these outcomes, so plans for video-monitoring would be necessary. The IACUC needs to hear more than that the animals “looked good.”

I am also concerned about the IACUC’s relationship with the veterinary team as described here, and when the committee would side with an investigator’s veterinary judgment over standard veterinary practice and the on-site veterinarians’ recommendations. Have the vets failed to properly educate the IACUC and researchers on the complexities of animal pain recognition, prevention and treatment? Are the veterinarians not forcefully advocating for best possible animal welfare? Does the IACUC have other reasons to dismiss GEU’s veterinarians’ judgment, and if so, should they ask the institutional officer to engage in some sort of review of the vet team’s qualifications and practice? This is the biggest concern in this scenario, as it may indicate inadequate veterinary care and pain management for more GEU animals than just Boyd’s monkeys. The IACUC has an opportunity to use this situation to improve pain management and veterinary care for all of the university’s animals.

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