advances in basic science enter the clinical realm every day, and therefore, during the precious years of formal education, veterinary students need to learn that a practitioner's life is a constant struggle against obsolescence.

Prier's statement that practitioner-teachers should not be ignorant of scientific advances is one of the best reasons for teachers and researchers to work in close proximity. This is especially important, because the mind-bending scope and pace of biomedical research will have an increasingly profound impact on the nature of clinical practice.

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Another reader opposing thoracic compression for avian euthanasia

Veterinarians are looked to as experts on all things animal, and as such we are expected to know the anatomy, physiology, behavior, and husbandry of the animals we treat. As a result, there is an expectation that any official document, such as the 2000 Report of the AVMA Panel on Euthanasia (*JAVMA*, Mar 1, 2001, pp 669–696), accurately represents us and our knowledge of animals to the larger public. This expectation was not met by the 2000 Report of the AVMA Panel on Euthanasia, because it does not accurately reflect some of the most basic knowledge that veterinarians possess about the animals we treat. There are many issues where I believe this particular report has erred, but I take particular exception to the report's stance that thoracic compression is an acceptable means for euthanatizing birds in the absence of known humane techniques such as barbiturate overdose. The AVMA report states that thoracic compression kills birds by stopping the heart and lungs. Birds have rigid, immobile lungs located in the dorsal-most aspect of the thoracic cavity. Thoracic compression will not stop the movement of that which does not naturally move. The report implies that thoracic compression also compresses and stops the heart, but those of us who have used thoracic compression in an effort to resuscitate a bird following cardiac arrest know that it is difficult if not impossible to compress the heart because of the shape of the thorax, the position of the heart within the thoracic cavity, and the protective pillow-like cushioning effect of the air sacs around the heart. What thoracic compression does do is prevent movement of the keel and thoracic wall and, thus, prevents the movement of air through the pulmonary system. The end result is that birds die by suffocation, a method of killing that is not humane, a fact that Dr. Bennett pointed out in his recent letter to the editor (*JAVMA*, Apr 15, 2001, p 1262). An oft used justification for this technique is that it is quick, but this argument raises the interesting and challenging concept of physiologic time.[1,2] What may be a brief moment in time to you and me may, in fact, be a very long interval to the animal that has a high metabolic rate such as a bird.

I look forward to the next revision of the AVMA Guidelines on Euthanasia. In the meantime, I will continue to use the 1993 panel report as my guide on euthanasia, a very important and challenging issue for our profession.

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Questions whether clients were properly informed about treatment protocol

As a 70-year-old male who has the dubious distinction of having endured benign prostatic hypertrophy (BPH) for more years than I care to mention, I was drawn irresistibly to the report, "Effects of finasteride on size of the prostate gland and semen quality in dogs with benign prostatic hypertrophy" (*JAVMA*, Apr 15, 2001, pp 1275–1280), by Kaitkanoke Sirinarumitr et al. In that report, the investigators sought to determine whether finasteride has any beneficial effect on naturally occurring BPH, using client-owned dogs.

Presumably, the clients were interested in alleviation of their dogs' problems without much ado, as I certainly would be if I were paying hard-earned money for professional attention to my BPH. If that were not realistically possible, one would at least presume that the clients signed an informed consent form before agreeing to 32 weeks of experimentation (16 weeks when 5 dogs were treated with finasteride, then 16 weeks when they were used as controls—or 16 weeks when 4 dogs were used as controls, then 16 weeks when they were treated with finasteride). Yet, nowhere in the Materials and Methods were readers assured that the clients were indifferent to immediate outcome or to the expense and anxiety of 32 weeks of fiddling around—or that they had signed such a form. For that reason, I am constrained to consider the study to be ethically flawed until proven otherwise.

My concern about the possibility of unethical clinical research was aggravated further when I read that "dogs in the control group were given 5 mg of powdered sugar in a gelatin capsule, PO, every 24 hours for 16 weeks."

If the clients were properly informed of their dogs' participation in the study, there certainly was no need to go through the exercise of giving a placebo (5 mg of powdered sugar) while their dogs served as controls. The only purpose of a placebo in clinical research is to preclude subjective presumption of a medicament's hoped-for beneficial effect.

Dogs with BPH do not hope for beneficial effect from swallowing a gelatin capsule, whether it is filled with finasteride or powdered sugar or is administered empty. I do hope, however, that the investigators can provide proof to their reading audience that each client was fully informed about the experimental protocol. If they cannot, I would hope, at least, that all future *JAVMA* reports on clinical research involving client-owned

animals will include a statement about informed consent.

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The authors respond:

Informed consent was obtained from owners of affected dogs described in our report, which included the understanding that their dogs may be randomly assigned to the control group for 16 weeks and receive the placebo treatment rather than finasteride. The owners were informed that, should their dogs be assigned to the control group, a 16-week course of finasteride would be provided to them at no charge at the end of that treatment. Treatment protocol and consent forms were provided to the Institutional Animal Care and Use Committees at the two institutions at which the study was performed (University of Minnesota and Washington State University). In addition, the informed consent form was sent to the *JAVMA* with the original submission of our manuscript. Although current "Instructions For Authors" (*JAVMA*, Mar 15, 2001, pp 925–928) do not request information on informed consent in clinical studies published in *JAVMA*, we would be happy to provide a copy of the form used in our study to interested readers.

The informed consent form indicated that cost of treatment and monitoring of the dogs would be born by grants from the University of Minnesota, the Orthopedic Foundation for Animals, the German Shepherd Dog Club of America, and the Shetland Sheepdog Club of America. These groups were recognized (p 1275) in our article. The "hard-earned money" spent by the dog owners on this treatment was limited to initial diagnostic evaluation leading to recruitment of the dogs into the study.

We encourage Dr. Koltveit to reread the Materials and Methods (p 1276) to correct his inaccurate assertion that dogs randomly assigned to the treatment group for 16 weeks were thereafter assigned to a control group (they were not). The Materials and Methods also describe the veterinary care that occurred during the 16-week (treatment dogs) or 32-week (control dogs) participation in the study, which Dr. Koltveit describes as "fiddling around." This care included multiple general physical, hematologic, and semen examinations over the 16-week period of treatment.

Administration of a gelatin capsule containing powdered sugar to control dogs as placebo treatment (as opposed to administration of finasteride in a gelatin capsule to treatment dogs) was an essential part of the study. The double-blind placebo-controlled trial (p 1276) is the gold standard of clinical trials. Neither the owner nor the clinician evaluating dogs on recheck examination or the radiologist evaluating and measuring the prostate glands was aware of the status (treatment vs control) in collecting clinical data; this blinding helps differentiate treatment and placebo effects, whether observed by the owner or by the clinician.

Finally, Dr. Koltveit's presumption that "the clients were interested in alleviation of their dogs' problems without much ado" is incorrect. The present standard of veterinary care, to which we adhere, is to recommend castration of affected dogs to clients interested in such alleviation. Owners of dogs in this study were interested in preserving their dogs' health and in preserving their reproductive capability or avoiding castration. We worked with them as a team to that end.

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