Case Study on Use on Animals for Veterinary Teaching

When students are admitted to veterinary colleges, they are generally focused on the goal of helping animals and alleviating animal suffering. Their orientation is bolstered by the veterinary oath, taken at graduation from veterinary school, that states, in part, "I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health, the relief of animal suffering, ..". Furthermore, over 75% of freshman veterinary students have a stated goal of working with companion animals (such as dogs, cats and horses), as opposed to working with animals raised for food. As they progress through the curriculum, however, many students feel themselves conflicted between their desire to help animals and some of the requirements of the veterinary curriculum.

Veterinary medicine is a 4-year program leading to a license to practice veterinary medicine on any non-human animal species. During the first three (pre-clinical) years of the veterinary curriculum, some courses require students to use animal cadavers or live animals to obtain and practice certain sets of skills. Anatomy, which requires dissection of animal cadavers, is taught in freshman year. Over the course of their first year in veterinary school, students work in small groups to dissect one dog, one horse, and one cow per group. Cows for this purpose are purchased at auctions or from slaughterhouses and horses are typically purchased as low-cost animals at in-state sales barns. Anatomy staff at the veterinary college euthanize these animals and prepare them for anatomical dissection by injecting latex into veins and arteries to permit their visualization. Dogs are usually random-source (not purpose-bred) dogs that are obtained as prepared cadavers from suppliers in the southern USA.

In second year, students begin learning basic surgical skills. Cooperative relationships with local humane societies or animal shelters allow students to practice inducing general anesthesia and performing routine neutering procedures (spays and castrations) on dogs and cats from these sources. Such arrangements are mutually beneficial as neutered animals have a much higher chance of being adopted when they are returned to the humane society.

Surgical procedures of no benefit to the animal are not permitted by humane societies partly because of public relations concerns and the dependence of humane societies on charitable donations. In addition, the complication rate (bleeding, infection and breakdown of the incision site(s) or dehiscence) is much higher when inexperienced surgeons perform procedures than when experienced surgeons operate. Accordingly, common surgical procedures at which the public reasonably expects all veterinary graduates to be competent, such as intestinal surgery to remove a foreign object, are learned in the junior year using dogs that are purchased for this purpose. Commonly, dogs are retired breeding animals from research facilities. These dogs would be humanely euthanized if they were not sold for this purpose as they have reached the end of their useful reproductive lives. At the veterinary college, the students evaluate the health of these dogs over 2-3 days and care for them during this time. Subsequently, the dogs are anesthetized, one or more surgical procedures are performed under general anesthesia, and the dogs are euthanized by intravenously administering an overdose of barbiturate while they are still under general anesthesia.

1. Make a list of ethical issues that arise in this case study.
2. Consider the anatomical dissection of animal cadavers by veterinary students in their first year.
   a. Identify all stakeholders in this issue.
   b. What are the benefits of students using animal cadavers for anatomical dissection?
   c. What are the costs of students using animal cadavers for anatomical dissection?
d. Is it morally permissible to dissect cadavers for student learning when the animals were expressly purchased and killed for this purpose? Why or why not?

3. Consider second year students performing neutering procedures on dogs and cats to be adopted out by humane societies.
   a. Are there any changes to the stakeholders listed in 1a?
   b. Are there any changes to the benefits listed in 1b?
   c. Are there any changes to the costs listed in 1c?
   d. Is it morally permissible for inexperienced student surgeons to neuter humane society animals for learning purposes? Why or why not?

4. Consider students performing intestinal surgery on dogs purchased for this purpose and humanely euthanized at the end of the procedure.
   a. What interests are at stake in this situation?
   b. Who are the stakeholders?
   c. What are the benefits?
   d. What are the costs?
   e. Is it morally permissible for student surgeons to perform terminal surgical procedures?

5. Would your answer to 4e change if the animals used for the terminal surgeries were pigs instead of dogs? Why or why not?

6. Consider the situation in 4 above. Suppose that instead of euthanizing the dogs at the end of the procedure, the dogs are recovered from anesthesia and provided the same level of care as would be the case if they were pet dogs with caring, committed owners. Would your answers to questions 4a-4e change in this situation?