Standard of care

Because the courts do not understand what nurse anesthetists do, they designate nurse anesthesia as a profession. The profession sets its own standards of care, and when the courts are faced with questions as to what those standards are, the courts ask for experts to testify. Some people erroneously assume or question whether there is a dual standard of care in the anesthesia field, one for anesthesiologists and one for nurse anesthetists. In fact, because of the nature of anesthesia and the fact that attention and proper monitoring of patients is the overwhelming consideration in the practice of anesthesia, there is in fact a single standard of care. The single standard of care is reflected not only in the "reality of practice" but also in the decided cases which discuss the standard of care.

Standard of care is closely related to the quality of care. A profession which renders care at a lower standard than another will, necessarily, have a different quality of care. As we know, in the anesthesia field there is in fact a rather uniform quality of care between nurse anesthetists and anesthesiologists, and that is further evidence that the "standard of care" is the same.

Numerous cases have set forth the standard of care for nurses, "to apply that degree of skill and learning in treating and nursing a patient which is customarily applied in treating or caring for the sick or wounded who are suffering in the same community." The case of Whitney v. Day 100 Michigan App. 707 (1980) is interesting because it was claimed that nurses were not entitled to the shortened statute of limitations available for malpractice. The charge was made that nurses had to be examined on the same negligence standard as the general population. In fact most cases have recognized that nursing is a skilled profession to which malpractice standards apply. In Whitney v. Day, the courts specifically discuss the profession of nurse anesthetists. The court said “nurse anesthetists are licensed as nurses and then they are certified after an 18 month period of study [this has, of course, been increased] in their specialty. Thus, they are professionals who have expertise in an area which is akin to the practice of medicine. Because a nurse anesthetist possesses responsibilities greater than those possessed by an ordinary nurse, and because those responsibilities lie in an area of expertise in which some physicians receive full residency training, we conclude that it was not error for the trial court to set forth a standard which . . . [incorporates as a malpractice standard] (Page 711). The court pointed out that the Michigan statute had been amended so that malpractice limitations were made specifically effective to all nurses.

Since nurse anesthetists have been recognized as a separate professional group which establishes its own standard of care, it is understandable that the uninformed would assume that this standard of care would be different than that of an anesthesiologist. For example, in another Michigan case, Theophelis v. Lansing General Hospital, (366 Northwest 2nd 249, 1985), there had been a suit against a hospital where both the nurse anesthetist and the anesthesiologist had been released prior
to trial. In what really amounted to legal maneuvering in the absence of any factual information, the hospital argued that a release of the nurse anesthetist and the anesthesiologist implied that the hospital was innocent as well. The court, attempting to justify the trial court's determination to let trial proceed against the hospital, wrote "we note for example that it would have been possible for the jury to determine that Nurse Palmer, given her limited training, was not negligent in failing to use a precordial stethoscope but that the hospital was negligent in not requiring the use of one." (Page 252). This is sheer speculation on the part of the court and not, in any way, a determination that there is a different standard of care for nurse anesthetists. It does, however, illustrate what can happen when laymen (who unfortunately include judges) are allowed to speculate in the absence of information about the nature of nurse anesthetists and nurse anesthesia.

More typical is the case of Webb v. Jorns, 473 S.W. 2nd 328 (Texas, 1971). In this case involving a cardiac arrest during the course of administering the anesthetic preparatory for an operation, the court turned its attention to whether the nurse anesthetist had been negligent; whether the patient had received an "overdose" of halothane. The expert testimony that was introduced was that of a physician. The testimony that was introduced was not testimony concerning what a nurse anesthetist would have done or would not have done under the circumstances. The question was whether in the physician's judgment there had been an overdose of halothane. The physician had testified that a mixture in excess of 1 1/2 % halothane would have been an overdose but the facts supported the position of the nurse anesthetist that the mixture had never exceeded 1 1/2 %. Thus, the standard by which negligence was judged was one of a general understanding of what happens in the anesthesia area and not one which focused on whether nurse anesthetists follow different standards than anesthesiologists.

In Aubert v. Charity Hospital of Louisiana 363 So. 2nd 1223 (Louisiana, 1978), anesthesia was administered by a first year resident in anesthesiology and a student nurse anesthetist. The chief of anesthesia at another local hospital testified that there had been a negligent intubation. There was no discussion as to whether nurse anesthetists have a different duty of care in intubating a patient than do anesthesiologists. Obviously, there is a right way to intubate a patient, and the failure to properly intubate, whether by nurse anesthetists or anesthesiologists, is negligence.

The Louisiana statute requires that health care professionals in a recognized field of specialty render professional services using a degree of skill ordinarily employed under similar circumstances by the members of that specialty. In another Louisiana case, Mohr v. Jenkins 393 So. 2nd 245 (Louisiana, 1981), the question was whether Valium® had been injected at too quick a rate. The nurse anesthetist had not used a watch to time the injection. The court pointed out that expert testimony revealed that the use of a watch was not the standard of practice and that "specialists do not follow manufacturers' inserts concerning the administration of Valium® or any other medicines strictly or literally." Again, the court is referring to a standard of care in the anesthesia field, rather than a standard of care applicable solely to nurse anesthetists.

In Parks v. Perry 68 NC App. 202 (No. Carolina, 1984), the question was whether numbness and weakness in a patient's hand resulted from the negligent administration of an anesthetic. There was no direct testimony that the acts of the nurse anesthetist were negligent. The trial court had submitted the case to the jury under the doctrine of Res Ipsa Loquitur based on expert testimony that the damage would not have occurred in the absence of negligent administration of an anesthetic. Again, the testimony that was admitted did not refer to the standard of care by nurse anesthetists and anesthesiologists but to what was common in the anesthesia field. In fact, the expert testimony was given by a physician and not by another nurse anesthetist.

Finally, in the case of Yoos v. Jewish Hospital of St. Louis 645 So. West 2nd 177 (Missouri, 1982), the question, on appeal, was whether there had been sufficient evidence from an expert that the damage occurred because of negligence. There were charges that the expert testimony was conflicting because the medical expert had testified that it was his "feeling" that the accident occurred, at least in part, because of technical error. On the other hand, the expert had previously written a book in which he had written "failure due to technical errors cannot be wholly excluded even in the most skilled hands." Nevertheless, the court accepted the expert's "feeling" as an expression of expert opinion. More to the point, the court based its decision on the expert's "feeling" that the accident should not have occurred, not on a discussion of the standard. Again, there are not separate standards of care as much as a recognition of what should and should not occur in the field of anesthesia.

Why is there only one standard of care in the anesthesia field? Because there is only one quality of care. The American Association of Nurse Anesthetists is now aware of five studies that have addressed anesthesia care outcome by the qualifications of providers of care. Each of the five studies concludes that there is no significant difference between the two providers.
As has been written before in this column, studies have shown that anesthesia incidents tend to occur because of human error or failure, not because of lack of education (R Keenan, CP Boyan “Cardiac Arrest Due to Anesthesia” 253, JAMA, page 2373; Risk Management Foundation Forum, Vol. 6 page 3). Care and attentiveness are not attributes that depend upon whether the practitioner is a nurse or a physician. Therefore, the standard of care in anesthesia is to be as careful and attentive as the human mind will permit.

AANA Journal Course

Test Yourself Answers
(Questions appeared on page 359.)

1. The “bucket handle” effect occurs through the action of the internal and external intercostal muscles on the ribs. Due to the shape of the ribs and the diagonal course of the intercostals from superior to inferior, the ribs exhibit an upward and outward arc during inspiration. This “bucket handle-like” movement increases the anterior posterior and transverse diameters of the thorax. The increased diameter results in an increased volume at reduced pressure thus creating a pressure gradient from atmosphere to alveoli.

2. There is a profound depression in the hypoxic response with the use of inhalation agents. The ventilatory response to hypoxia is depressed to an even greater degree than the depression in the CO2 response curve. Subanesthetic concentrations of inhalation agents inhibit the response to hypoxia, and at one MAC halothane the response is totally absent. Narcotics decrease the ventilatory response to hypoxia in a dose-dependent manner. The respiratory depression is due to the direct action on the respiratory centers located in the brainstem.

3. The use of humidified volatile agents is ideal for the patient with emphysema. Humidification of inhaled gases is necessary to prevent the drying of airway secretions. Halothane, enfurane, and isoflurane are all equally acceptable agents to administer. They are quickly eliminated through the respiratory system, and provide valuable bronchodilating properties. Inhalation agents can increase right-to-left shunting due to the diminished HPV. The use of nitrous oxide is acceptable, but limits the oxygen concentration that can be delivered. It may also cause pulmonary bullae to expand and rupture, leading to the possibility of a tension pneumothorax.

4. Obesity affects the respiratory system by increasing the mass to be moved during inspiration. This increases the work of breathing, oxygen consumption and CO2 production. The need to exert excess energy to achieve adequate inspiratory volumes results in chronic fatigue with CO2 and lactic acid buildup.

5. Pulmonary function test results for restrictive and obstructive pulmonary disease are as follows:

Restrictive Disease
a. Reduced FVC
b. Reduced FEV1
c. Normal or slightly increased FEV1%
d. Normal flows are maintained in the flow volume loop, but the horizontal length of the curve is shortened due to the decrease in vital capacity.

Obstructive Disease
a. Reduced FVC
b. Large decrease in FEV1 (to a greater extent than FVC)
c. Large decrease in MMEFR
d. Reduced FEV1%
e. The expiratory aspect of the flow volume loop is extended and flattened as a result of the reduced flow rate during expulsion of the last part of the vital capacity.