EDITORIALS

The Responsibility for Breathing

THE deliberate production of apnea and the use of controlled respiration during clinical anesthesia are methods that are used frequently and accepted widely. The usefulness of these procedures are so well established in clincial practice that there is little need to elaborate on the advantages. There is also no reason to deplore the disadvantages. The values are proven, they are good, and they provide benefit of considerable importance to many patients.

However, so frequent is the production of apnea during general anesthesia and the use of controlled respiration during the apneic state, that the commonplace has become casual to too many anesthesiologists. So casual is the attitude of some that it is not unusual to see bag squeezing in the most desultory fashion. Sometimes the bag is behind the anesthesiologist's back; occasionally it is squeezed between his knees; once in a while he compresses it thoughtlessly between one hand and a solid object while he diverts his attention elsewhere and discusses other things. It is even possible that he forgets to press the bag at all.

This attitude toward breathing is in curious and striking contrast to the same anesthesiologist's attitude toward the care of artificial circulation during open heart surgery. He is in complete accord with the elaborate preparations which attend the establishment of extracorporeal circulation. He is proud to be a part of the team and frequently he becomes the "physiological director" of this particular grand opera. Implicit in this curiously divided attitude toward respiration and circulation is the failure to remember that patients can die and be disabled just as readily from inadequate or improper respiration as they can from failure of the circulation.

It is time to introduce a word of warning. The establishment of apnea and controlled respiration deliberately for clinical purposes implies the acceptance of a responsibility by a physician which is as serious as any that occurs in clinical medicine. The anesthesiologist must accept full responsibility for the vital process of breathing for another individual, a patient who is rendered unable to breathe for himself. Once having produced apnea, nothing must be allowed to interfere with the rhythmical inflation of the patient's lungs every few seconds. In the event of mechanical failure or exhaustion of oxygen supply, respiration must be continued with expired air techniques.

He must provide an impeccable airway for the patient. It is insufficient to extend the head in the manner of "rescue breathing" by this method. The advocates of "rescue breathing" have always pointed out that this form of artificial respiration is effective but must be considered as an emergency measure and not a substitute for the best of care from the anesthesiologist. The anesthesiologist who believes that he need only place the head of the patient properly during clinical surgery does his patient a great disservice. In the majority of instances it will be necessary to use an endotracheal tube if the airway is to be be maintained with reasonable security. The anesthesiologist must not only make the correct decisions but must have a skill that is firm, secure and rapid in intubating the trachea correctly. Further, he must be aware that respiratory obstruction can occur even with a tube in the trachea.

Once the airway is established the anesthesiologist must provide effective movement of gas to oxygenate the blood adequately and to remove carbon dioxide efficiently. It is implied that he must understand the mechanism of gas transport and gas transfer, and he must understand how to provide efficient artificial ventilation (whether it be manually or mechanically) to achieve these goals. He must therefore be prepared, when his clinical senses are insufficient to the task at hand, to

measure those parameters which will tell him the status of his patient for whose respiration he has accepted responsibility. It follows further that the anesthesiologist who accepts this responsibility must be aware of all the complications of carbon dioxide retention and of anoxia. This means that in addition to the knowledge of respiratory function, he must be aware of other changes in the body which follow the derangements produced by apnea as well as the changes produced by controlled respiration. He must test his apparatus and be responsible for its function.

Assuming that he can see the patient safely through these difficulties or avoid them, the anesthesiologist must have the clinical acumen and the scientific knowledge to restore the patient's breathing to normal before he is left to his own devices and his own defenses. The anesthesiologist, in short, must be familiar with the breeding of apnea and the cyclic changes which keep it going. He must be aware of how to separate red herrings from facts. He must understand how to terminate the apneic state. During the transition period he must maintain effective breathing for his patient. His responsibility does not cease until the patient is completely normal and well.

It appears as though the apneic state and controlled respiration, like so many good things, have been abused. The phenomenon itself deserves the praise it has received. But the people who use it must be alert to their responsibilities. An anesthesiologist has to be something more than his brother's keeper. He has to be his brother's breather.

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Service Through Self-Sacrifice

Among the articles appearing in this issue of the Journal is one entitled "The Art of Preparing the Patient for Anesthesia." The author includes in her paper some of the basic tenets of all religious philosophies, and certainly of Christianity. The thought of service through self-sacrifice is evident throughout the beliefs of most enlightened races. An example in the Christian religion is the prayer of St. Francis of Assisi, which is as follows:

"Lord, make me an instrument of Your peace.
Where there is hatred . . . let me love.
Where there is injury . . . pardon.
Where there is doubt . . . faith.
Where there is despair . . . hope.
Where there is darkness . . . light.
Where there is sadness . . . love.

O Divine Master, grant that I may not so much seek
To be consoled . . . as to console.
To be understood . . . as to understand.
To be loved . . . as to love.

For
It is in giving . . . that we receive.
It is in pardoning . . . that we are pardoned.
It is in dying . . . that we are born to eternal life."

Doctor Rodger is actually proposing that much of this prayer be carried out in pardoning the patient's bad behavior and in sowing faith and hope. She advocates consoling and understanding but, most of all, she suggests that the anesthesiologist give of himself more than is necessary.

The anesthesiologist can't wait in the doctor's dressing room or in his office until "they" are ready in the operating room and then offer the self-sacrificing service shown in this author's practice. It is a sacrifice to be instantly available and in observing those needs pointed out. Only through service are we able to exist in society; although one may be a selfish physician or a selfish carpenter, the laws of the land and the mores of society are sufficient to force service enough from the individual in most instances so that he functions in his profession to the extent of earning a living for himself and in performing his task acceptably. His success is not because of his selfishness, however, but in spite of it; and although he may serve society for many years with a selfish philosophy, he never serves himself sufficiently to find happiness in