

THE SPECIAL CARE UNIT

Its Place in Postoperative Care

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CHANGING practices in surgery and anesthesia, coupled with an improved understanding of disturbed bodily processes, have resulted in a need for a type of medical care which strains every facility in a hospital. At no time in the patient's hospital stay is this more apparent than in the early postoperative period of the seriously ill patient.

Surgery has been extended into all cavities and organs of the body. It is possible to remove tumors from deep in the brain, to manipulate within the chambers of the heart and to remove lungs with safety. Deliberate hypotension, hypothermia, extracorporeal circulation and oxygenation are now employed. The effects these techniques have upon homeostatic mechanisms and the hazards thereto are generally recognized. Though by no means are results always good, morbidity and mortality have not been overwhelming. This must be attributed to the fact that associated with technical advances in surgery there has come a knowledge of supportive therapy to be applied during periods of stress. Until relatively recently patient support has been on a more or less empiric basis. It still is in many regards, but support is becoming more specific because of better understanding and by use of monitors which enable the surgeon and anesthesiologist to detect early deviations from normal. The electroencephalogram, electrocardiogram, carbon dioxide and oxygen analyzer and others allow for early detection and correction of altered function.

This type of improved support has been extended from the operating room into the immediate postoperative phase by the development and use of recovery rooms. However, in a certain percentage of the patients attentive postoperative surgical care must be continued.

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Blood volume deficit, metabolic and electrolyte imbalance, hypoxia and carbon dioxide retention require early recognition and treatment. The seriously ill patient seldom presents a simple problem and the skills required for his care are many. He demands the attention of experienced nurses and physicians familiar with the surgical procedure and the possible complications thereto. It is important that his attendants have the ability to perform tracheobronchial aspiration and tracheostomy, the care of surgical pneumothorax, and to handle the various types of drainage and respiratory equipment, pressure transfusion apparatus, and the like.

Heretofore in our institution patients leaving the recovery room were distributed to the many units of the hospital where, unfortunately, it was impossible to maintain the high degree of skilled nursing and medical attention the patient received in the operating or recovery rooms. The right kind and number of people needed to care for the extremely ill patient can never be available on all units simultaneously. It is also impossible to have distributed throughout the hospital enough of the proper equipment with trained people to operate it. To continue the careful nursing and observation the patient received in the operating and recovery rooms, patients requiring such care should be concentrated in an area where suitable equipment and personnel are always available.

Such areas are termed "special care" or "intensive care" units. We believe that this unit should be close to the operating room first, to minimize travel time and secondly, to be close to members of the anesthesia department, since many of the emergencies are respiratory in character.

The unit contains 16 beds and is divided into two 4-bed, one 3-bed, one 2-bed and three single-bed rooms. The area is constructed to allow maximum visibility from the central nursing control desk, through use of

TABLE 1
NURSING AND ANCILLARY PERSONNEL REQUIRED
TO STAFF THE SPECIAL CARE UNIT

	Day	P.M.	Night
Supervisor	1		
Head Nurse	1		
General Duty R.N.	6	2	2
Practical Nurse	1-2	1	1
Orderly	2	1	1
Dressing Room Aide	1		
Receptionist	1		
Hospital Aide			1
Administrative Secretary	1	1	

glass partitions. Closely adjacent are a small laboratory, a resident's bedroom and conference and waiting rooms.

The most important factor in the success of this unit is proper medical and nursing staffing. This unit, like the operating room, needs a high degree of cooperation between medical and nursing personnel to function well—in this instance between the surgical resident and the head nurse. Insofar as possible a senior surgical resident spends his full time on this unit. His duties are both medical and administrative, for not only is he responsible for the care of the patients but he also makes the decision as to which patients to accept or reject when there are insufficient beds. Inasmuch as he works closely with the nurses his ability, enthusiasm and interest are immediately reflected in the quality of medical and nursing care.

To care for many seriously ill patients in a single unit requires a greater complement of nurses of higher ability than in other areas. The head nurse should be a woman of great ability, proper personality and mature judgment to supervise highly qualified nurses and to maintain discipline and morale. Table 1 lists the nursing and ancillary personnel we endeavor to maintain on the various shifts.

The proximity of the seriously ill and medical and nursing skills engenders a psychologic approach to the patient which calls for attention with a sense of immediacy. Although the atmosphere may on occasion be tense, there is a business-like and serious-minded approach to the patients' needs. There is minimum delay in the institution of treatment, for all necessary equipment is kept close at hand.

In our first three-year experience approximately 3,000 patients were admitted to this

unit. During this interval, 33,224 patients were operated upon. Of these, 19,250, or 57.9 per cent, went to the recovery room, from where 2,700, or 9.0 per cent of the patients operated upon, went to the special care unit. Three hundred patients were admitted directly from areas other than the operating room. This latter group were admitted for a variety of reasons, such as serious gastrointestinal bleeding, multiple chest injuries, etc.

Table 2 lists the percentages of patients admitted to the unit by service. The general surgical service was responsible for the greatest number of patients on this unit, for 17 per cent of all the patients operated upon by that service were admitted. The service which depended most upon the special care unit, however, was the neurosurgical service. Although total utilization by this service was small, 36 per cent of the neurosurgical patients were admitted to this unit.

An endeavor is made to maintain a high census to fully utilize the advantages of this unit. Patients are admitted from any unit in the hospital and the Accident Room, upon recommendation of the one responsible for his care. The decision to send the patient to this unit is not always easy, for in a departmentalized hospital such as ours, where patients are segregated as to medical specialty, there are advantages to going to a specialized nursing unit, as pediatric, orthopedic or urologic. Regardless of his anatomical diagnosis, however, acute circulatory, respiratory or metabolic disturbances may often be better and more efficiently treated in a unit where such therapy is a continuing function—the special care unit.

A variety of medical problems has made this

TABLE 2
PERCENTAGE DISTRIBUTION OF PATIENTS ADMITTED
TO THE SPECIAL CARE UNIT BY SERVICE

	Per Cent
Surgery	80.9
Neurosurgery	9.6
Fracture & Orthopedics	1.6
Ear, Nose and Throat	2.0
Gynecology	1.04
G. U.	1.8
Eye	.16
Medicine	.64
Neurological	.25
Pediatric	1.7
Dental	.06

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unit of great value as a learning and teaching experience. The surgical resident accumulates a tremendous experience of surgical complications in a very short interval. The endeavor to maintain a full census results occasionally in discharging patients before it may be ordinarily advisable. Thus, it is impossible for us to state categorically what would be an ideal number of beds. Had we more beds available it would have been possible to accommodate more than the 3,000 patients during this three-year period. Many times patients were either denied admission or were not booked to come to the special care unit because of limited space.

Patients are denied special duty nurses on this unit, for we believe that the nursing care the patient will receive by part-time attention of the regularly available nurses is likely to be better than the hit-or-miss quality from many of the special duty nurses. Changing surgical and nursing practice demands that these patients receive nursing at the hands of those with continuing nursing experience on seriously ill patients.

The segregation of patients in the unit is based upon individual need and sex. No consideration is given as to whether the patient is "service" or "private." Single-bed units are used for terminal care, for patients in respirators, seriously burned individuals and persons

requiring isolation. The two beds behind the nursing station are reserved for the very young. There has been little unfavorable reaction to grouping the patients in this fashion. The patients and their families have accepted the fact that the patient is receiving the very best in nursing and medical care. For this they have been prepared by the attending staff.

No additional charge is made for the use of these accommodations. The patient pays the same charge for the use of the bed in the special care unit as he paid for his original accommodations.

SUMMARY

In a three-year experience at the Rhode Island Hospital, 3,000 patients were admitted to the special care unit, 2,700 of whom were immediately postoperative. The remaining 300 were nonoperative. This unit was developed to meet the need which an improved appreciation of the increasing burdens of disease, surgery and anesthesia have placed upon physiologic processes. The patient's requirements can be better met by concentrating the seriously ill and those fitted to care for them in a given area. The combined presence of those capable of rendering and those in need of the utmost in nursing and medical care improves the patient's chances of return to health and family.