Psychiatric Aspects of Patient Care in the Operating Suite and Special Areas

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TWO FUNDAMENTAL OBSERVATIONS should be made initially in any discussion of psychiatric aspects of patient care in the operating suite and related areas:

1. The hospital is a unique and usually-terrifying experience for patients. It is too easy for those of us who live in this environment each day to adapt to it as a matter of routine and to overlook its uniqueness in the experience of patients.

2. The emotional responses of patients in the operating suite and special areas are worthy of concern, not for humanitarian reasons alone, but because these responses are accompanied by physiologic reactions which can be clinically significant.

Evidence of the wide variety of physiologic responses to stress continues to accumulate. For example, the impact of anxiety on the cardiovascular system of a patient undergoing open-heart surgery is obvious. The biological responses to depression and anxiety, however, may also influence susceptibility to a variety of illnesses and play a role in the general recuperative powers of the human organism. It is, therefore, essential that each patient exposed to the great stress of a surgical procedure be allowed to undergo that experience under optimal conditions.

In addition to these psychophysiologic considerations is the need to avoid producing unnecessary emotional distress. In some ways anxiety and depression can be the most painful of human experiences. Patients usually expect physical pain and have faith that it can be relieved and eventually will cease. Anxiety and depression, however, often reflect unknown or unspoken fears and are thus inaccessible to our help. These feelings may, in fact, reflect a patient's fear that no help is available. In addition to immediate overt emotional distress, a patient may manifest the emotional reaction in a disguised or delayed form, *e.g.*, a patient who appears totally oblivious to a cardiac arrest in the patient across the room may soon become excessively demanding of time from the nurses as a manifestation of his anxiety. Or a patient who appears oblivious to such an event, following the experience, may become chronically anxious, with insomnia and nightmares. We must also consider the impact of a frightening hospital experience on a patient's future reaction to the prospect of hospitalization. This is particularly important in the management of children, since it can influence their response to illness, doctors and hospitals for a lifetime. Ideally, patients should be protected from traumatic experiences and treated for the consequences if such protection cannot be provided.

I will review the patient's experience from the moment the anesthesiologist begins to play a role, describing the potential sources of emotional difficulty and what can be done to prevent them or treat their effects.

The value of the preoperative visit by an anesthetist in reducing anxiety has been substantiated.[1] This is not surprising, since patients, universally apprehensive prior to surgery, are able to invest their doctors with the omnipotence delegated by frightened children to their parents. The preoperative visit by an anesthetist can considerably reduce a patient's anxiety since some of the apprehension regarding surgery does relate specifically to concerns about anesthesia. The benefits of such a visit in terms of a smoother operative and postoperative course have been described.[2] Many of a layman's fears of our routine procedures can be put to rest by a realistic exploration of these

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concerns. Most patients merely require the opportunity to ask the questions. For many of them these specific questions are a way of dealing with their anxiety about the general unknown of anesthesia and surgery. The straightforward, businesslike manner with which these questions can be answered is, in itself, reassuring. Some patients may benefit from only a very general word of reassurance without any detailed description of the procedures. With experience, the anesthetist can learn to tailor the visit to meet the needs of the individual patient. Having established his identity with the patient, the anesthetist will also be a reassuring familiar figure when he enters the operating suite.

While the visit by the anesthetist is a valuable experience for patients, appropriate premedication is also needed. Anesthetists have observed that some patients are not adequately premedicated and, therefore, go into the operating suite still so alert that they are terribly frightened by the sights and sounds of the operating room. Preoperative orders are usually written in doses which are clearly safe since patients will be in transit without adequate supervision shortly after they are given. For many patients these safe doses provide inadequate sedation. To eliminate this problem it has been suggested that patients be sent to a special preoperative preparation area under the control of an anesthetist and then premedicated. Patients could be brought there approximately an hour prior to surgery. In this room they could be adequately premediated and reassured by the anesthetist, who could answer any last-minute questions. The surgeon would also be more readily available there to reassure his patient regarding the procedure that lay immediately ahead. This could be of great value. Obviously, this proposal involves complicated administrative considerations. However, if one is thinking in terms of an ideal arrangement, I feel that such a preoperative preparation room has great merit.

The preoperative preparation room can also provide an opportunity to inform the patient in a reasonable way of what to expect at the time he awakens in the recovery room. My experience in dealing with patients, and in discussing this problem with recovery room nurses, is that too often patients awaken from surgery totally unprepared to deal with what they find. They have not been told that they will have intravenous feedings; they have not been told that there will be urinary catheters; they have not been told that they might have a nasogastric tube. For some patients, awakening under these unexpected circumstances can be frightening. The implication of the unexpected is that something untoward has occurred. It could be the responsibility of the anesthetist, if it has not been done by the surgeon, to alert the patient to what the immediate postoperative period will be like. Such preparation is a valuable means of reducing postoperative anxiety.

The operating room itself had been considered one area in which the patient's psychological responses could be temporarily ignored. Recent reports have suggested that this may be a false assumption. The work of Cheek[4] and Levinson[5] indicates that patients may perceive remarks made while they are ostensibly completely anesthetized. The problem is enhanced by the increasing use of muscle relaxants, which can obscure a patient's level of consciousness.[6] These workers have demonstrated through the use of recall under hypnosis that remarks made during surgery have been recorded. A remark which suggests that something has gone wrong seems to be imprinted most readily. Such an experience can apparently produce postoperative anxiety or depression. This problem is more apparent when dealing with the patient who is being operated upon under regional or spinal anesthesia. The usual sedation provided these patients still allows an awareness of what is being said. Even the apparently well-sedated patient remains concerned to some degree with the course of his operation. The awareness of the danger of untoward remarks in the operating room can reduce the likelihood that they will be made. However, in those instances where such remarks are made because of an emergency, it is useful to keep in mind that the patient may have recorded them. A discussion of this possibility could be of value in eliminating postoperative anxiety or depression which seems to have no other obvious source.

The Recovery Room

Until recently, little attention had been paid to the psychological responses of patients in the recovery room. However, a paper by Winkelstein, Blacher and Meyer [7] questions the assumption that patients in the recovery room are too obtunded to be aware of what goes on about them or to communicate their concern regarding their recent surgery. They interviewed a series of patients in the recovery room. Very shortly after emerging from surgery the patients were able to relate directly to an interviewer. They were also able to recall, 24 hours later, much of the content of these interviews. Therefore, what many have thought is a pharmacologically-induced obtundity may well be the use of the mental mechanism of denial to blot out the unpleasantness of surgery and the frightening sights and sounds which surround the patient in the recovery room itself. This is not to suggest that denial may not be the most effective mental mechanism to be used by an individual in such circumstances. But it should be noted that such patients are not as oblivious as may first appear to what has happened to them or is happening to them. This knowledge should be applied to the management of the recovery room experience for patients.

What are the frightening aspects of the recovery room? Typically, a recovery room is a large, open area in which a group of patients lie around at various levels of consciousness, an area in which one patient may be lying for three hours waiting for spinal anesthesia to wear off, while across the room, a patient who has suddenly begun to bleed is being frantically worked upon by a group of physicians and nurses. In the same room, a patient emerging from anesthesia is screaming loudly for pain relief while another patient, awaiting transfer to her floor, lies quietly, staring off into space apparently oblivious to what goes on about her. In another corner, a patient has been told that the analgesic which she had been given an hour ago is all that was ordered and she must bear the pain until she returns to her floor where more medicine can be ordered. Across the room, a child who has just had a tonsillectomy lies terrified, watching this group of sick adults. The picture I have painted is perhaps not typical of all recovery rooms but demonstrates the psychological problems which do exist there, the problem of unnecessarily exposing patients to frightening experiences by allowing them to observe all that goes on about them; of unnecessarily exposing them to frightening remarks by staff who believe they are oblivious to these comments; the problem of inadequate analgesia for patients left with only postoperative orders to be administered upon return to their hospital floors. There is especially the problem of the impact of this generally-horrifying scene upon the mind of a child.

What can be done to reduce the anxiety-provoking aspect of this room? One basic change can be made in the structure of the room itself. It should be feasible to construct a room with a central nursing station and individual cubicles for patients. In this way, patients would not be totally exposed to the sights and sounds of other patients about them. While it is true that with limited nursing staff one must provide easy access to all patients, there is no reason why bed stalls cannot be separated by low-level partitions, so that the patient, lying in bed, is effectively screened from adjacent patients. Curtains can also be provided on an overhead track to provide complete privacy when indicated. Hopefully, someone will remember to close them at the appropriate times.

There is a special danger that, with increasing reliance upon electronic monitoring equipment, the recovery room could too quickly become a place in which patients attached to machines are watched from afar by nurses and medical staff. This would be most unfortunate. Patients coming out of anesthesia are in particular need of human contact for reassurance that all is well. No machine can provide this. While monitoring equipment can greatly increase our medical effectiveness, it cannot serve as a substitute for good nursing care and human contact.

The Columbia Presbyterian Medical Center has recently assigned an anesthesiologist full time to the recovery room. This has been extremely worthwhile. It provides a physician to make the necessary critical medical decisions without delay. It does much to improve the morale of nursing staff, who can now feel

more secure with a physician on the scene. One problem in recruiting nurses for these areas is their anxiety regarding the great responsibility they must bear. The knowledge that a physician is available on the scene at all times can make the job more acceptable.

It is strongly recommended, whenever possible, to have a separate recovery room for children. The surgical experience is difficult enough for them without their being exposed to the recovery room of a general hospital. Some of the suggestions made for the adult recovery room could be applied here. For example, the special preoperative preparation room could be of great value. Here a child could be adequately premedicated and perhaps have a final reassuring visit from a physician. If possible, the route by which children enter the operating suite should not take them past the recovery room. The recovery room could be constructed as suggested for adults so that patients are separated in cubicles and thus not completely exposed to whatever disturbing scene may occur in their vicinity. Children awaiting transfer back to the hospital proper could also be sapareted from those still recovering from anesthesia. The special pediatric recovery room also provides a group of nurses specially trained to deal with the specific problems of children, both psychological and physiologic. These nurses develop an expertise in dealing with children which can be remarkably effective.

Despite all efforts to diminish the anxiety-provoking features of the recovery room, I fear that there are certain limits to what can be done. I would, therefore, recommend that patients be removed from the recovery room to their hospital quarters as quickly as possible. It was striking, for example, that even in a special pediatric recovery room frightened children would stop crying when placed on the stretcher to return them to their hospital beds. Returning to the hospital proper removes the patient from the recovery room scene and also indicates to him that all is well. A delayed departure for some administrative reason, *e.g.*, waiting for a nursing shift to take place, can be interpreted by the patient as a sign that something is surgically wrong.

The tendency to use the recovery room as an Intensive Care Unit in those hospitals not adequately equipped for intensive care patients is unfortunate. While in these areas patients do receive the necessary life-saving attention required, one must appreciate the emotional impact of a long-stay experience in a typical general hospital recovery room. As a stopgap measure, such double use of the recovery room may be necessary, but one should never rely on this as a permanent solution to the problem of providing adequate extended intensive care. Since the physiologic concomitants of anxiety can produce serious medical complications in some patients, one can pay a high price for this arrangement.

Intensive Care Unit

In many ways the Intensive Care Unit (ICU) is an extension of the recovery room concept to the hospital proper, *i.e.*, the organization of highly-trained staff specialists and equipment to manage optimally the critically ill. The concept can be applied in different ways. Some hospitals maintain only one ICU which contains all medical or surgical cases deemed to require critical care, so here we find the postoperative cardiac surgery patient in the same room as the post-coronary patient. In other centers there is great specialization, with coronary care units, cardiac surgery recovery units, respiratory problem units, general surgical units, etc.

The psychiatric problems in such units fall into four categories:

1. The psychiatric reactions produced by the serious medical–surgical illnesses that bring the patient to such a unit.

2. The psychiatric reactions produced by the unique environment of the unit.

3. The psychiatric reactions produced by the ICU which manifest themselves after patients leave the unit.

4. The emotional reactions of professional staff working in the unit.

There are, of course, a great variety of psychiatric problems which can arise coincidentally in an ICU. Their management has been discussed in more detail elsewhere.[8] The major problem is the acute organic brain syndrome, or delirium. While the symptoms of this disorder usually can be treated adequately with phenothiazines, it is imperative that the treating physician determine what physical

change in the patient's condition is responsible for the change in his mental state.

There may be psychiatric complications, however, which are specifically related to the ICU expreience itself. The initial observations[9, 10] were made in an open-heart recovery room, where a high incidence of delirium was noted. In the opinion of some observers[9, 10] this was due, in part, to the impact of the environment on the patient. The delirium appeared to clear rapidly after the patient was transferred to the hospital proper. This suggested that the relative sleep deprivation, the immobilization, the monotonous ominous monitoring devices, the atmosphere of tension and emergency, all contributed to the formation of a reversible psychiatric disorder.

To reduce these environmental stresses the following recommendations are made for the construction and management of intensive care units:

(1) Patients should be placed in individual compartments. It is possible to separate patients from each other and still provide adequate observation.

(2) Monitoring equipment should be maintained, when possible, outside of the patient's cubicle. Bedside monitors could be turned on only when needed. This will reduce the monotony of any constant rhythmic signal and will also reduce anxiety in those patients who are aware of the significance of these devices.

(3) Nursing and medical procedures should be scheduled to allow for adequate uninterrupted sleep. The usual day-awake, night-sleep pattern should be maintained whenever possible.

(4) Patients should be allowed maximum mobility by removing as many wires and tubes as possible from their extremities. Telemetering equipment could probably best achieve this.

(5) An outside window should be within the patient's view to assist in orientation. Similarly, a visible clock and calendar would be helpful.

Above all else supportive interaction is needed with a staff who appreciate the emotional impact of the environment on patients. The greatest danger is that we can become so absorbed with the equipment that we forget the person attached to it. A colleague remarked to me one day, "I suddenly realized I was treating the monitor and not the patient." This is a setting in which patients need more, not less, time with their physicians.

It has been suggested that some patients may manifest adverse psychological responses to an intensive care unit experience after they leave the unit.[11, 12, 13] While patients may be reassured at the time by the constant attention of the intensive care unit, they are simultaneously made increasingly aware of the apparent great danger in which they find themselves. This reaction may produce difficulty when such patients are transferred to a more standard hospital setting or may affect their reactions after hospital discharge,[11] *e.g.*, a patient may become excessively concerned regarding his ability to return to his previous life activities. Physicians, therefore, should provide their ICU patients with ample opportunities to talk out their fears. Many of their concerns can be easily dispelled with such supportive discussion.

Staff Problems

The key to maintaining staff morale in these critical hospital areas is to appreciate that they constitute a special environment for staff as well as patients. While we can develop the necessary defenses to help us function here, we must not lose sight of the fact that these special areas bring us closer to the ultimate responsibility for life or death than any other aspect of hospital medicine. It is, therefore, wise to stop and examine the situation with this in mind and to see what can be done to reduce the stress.

The ICU and RR are the hospital areas where nurses have the greatest responsibility. They may have increased freedom of action also. This sets the stage for anxiety, since nurses are trained to act only on the orders of a physician. Problems, therefore, often arise when the exact limits of such action are not spelled out. Responsibility without authority or training to take proper action can only lead to anxiety. These issues must be carefully thought out for these hospital areas. Obviously, the presence on the scene of a physician, *e.g.*, in the Recovery Room full time, can be a great source of reassurance to the nursing staff. If this is not possible, it is imperative

that there be a carefully thought out and efficient procedure for communicating quickly with a responsible physician. There should be no question as to who is responsible in any given situation and that person must, in fact, be readily available. To be available means not occupied with such other responsibilities at those times as to make it impossible to respond rapidly to an emergency call. To have a physician present is preferable since nursing staff may be reluctant to call a physician not on the scene, for fear that such a call will be seen as a sign of inadequacy. This reluctance to call for help can also exist in house staff.

It is important to nurses to have a chief who is aware of their special problems in these areas. Such understanding can be demonstrated by providing them with non-nursing personnel, *e.g.*, ward aides and secretaries, to handle non-nursing chores. This relieves the conscientious nurse of the chronic sense of uneasiness which will occur when routine tasks remain undone. Every opportunity should be provided for relief during the day. Those breaks are needed to allow for restorative anxiety-free moments. Regular meetings with her staff should be instituted by the charge nurse. This is important to maintain morale and team spirit in a group working under pressure. Regular meetings with the physician in charge should also be scheduled to provide the nurse with a feeling that a direct channel of communication is always available. This is preferable to meetings which are held only on specific request.

One comment regarding anesthesiologist morale. The Department of Anesthesiology at the Columbia–Presbyterian Medical Center in recent years has been assigning its men to specific specialties for extended periods of time. Individuals are assigned to subspecialties such as pediatric, neurologic or cardiovascular surgery where specific expertise is clearly required. However, they are also assigned to such areas as orthopedic, gynecological or urological surgery. While these latter specialties may not require the same degree of special knowledge as the former group, the opportunity to work with one group of surgeons over a period of time can produce increased surgical effectiveness. Of course, such a system is practical only in large hospitals, and requires some administrative flexibility to meet individual needs. I believe this approach does have positive values. It gives each man an opportunity to develop greater facility in his area of specialization. It provides improved teaching and research opportunity for those interested. It also gives the anesthesiologist an opportunity to develop closer personal relationships with the surgeons with whom he works. It seems to me that this would be especially gratifying to the anesthesiologist, who can be too quickly taken for granted and treated in an impersonal way.

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