THE ESTABLISHMENT AND MANAGEMENT OF A RECOVERY AND RESUSCITATION WARD

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SUMMARY

The establishment and management of a recovery and resuscitation ward with its aims, advantages and disadvantages, structure, composition and equipment have been discussed. The ward, which has been maintained at Sydney Hospital over the past six years with great benefit to patients, surgeon and anaesthetist, has been described as an example of this type of unit.

It is well established that two important danger periods occur when a patient is submitted to surgery—the first during induction of anaesthesia and the second in the immediate post-operative phase. It is in this latter period, when operative tension has been eased and the patient has passed from specialist care, that he is especially liable to succumb to complications which may develop before his compensatory mechanisms have returned to their normal state.

Of course the patient may well require attention due to surgical complications, but in surveys of deaths attributable to anaesthesia, the immediate postoperative period features not infrequently as the time of the catastrophe (Pask, 1955; Edwards et al., 1956). In spite of modern anaesthetic techniques and skill, following which the majority of patients leave the operating theatre in a conscious state, many complications may develop due to the major nature of the surgical procedure, to the anaesthesia, the postoperative medication or the debilitated state of the patient. The prevention and management of these complications are facilitated if postoperative patients are expertly observed and nursed in a recovery and resuscitation ward.

Definition.

Nomenclature varies with the uses to which this ward is put.

A recovery room or ward is one in which the patient remains until the anaesthetic agents have expended their effects and the return to full consciousness and reflex activity has been attained.

If this period is extended to include intensive and specialized therapy, the ward can correctly be termed a recovery and resuscitation ward.

Ideally a recovery room, adjacent to a theatre suite, should be separate from an intensive therapy ward where patients requiring such treatment should be sent. However, limitations of space and in structure often lead to these two functions being combined in the one unit.

Aims and advantages.

Basically, the establishment of such a ward aims at increasing the safety of the patient by ensuring adequate postoperative supervision, and regular monitoring of his condition. This must lead to early detection and intensive treatment of complications with consequent reduction of morbidity and mortality.

The economy resulting from grouping emergency equipment in one place is another important factor.

The postoperative case can be a cause of great concern in the general ward, and too often this patient is left to the care of a junior nurse, or is virtually unattended. If a recovery ward exists in a hospital a great load is removed from the general wards with benefit to the patients in those wards and of course to the postoperative patient.

The continuity and increased concentration in the tuition of nurses leads to a greater efficiency in their training in the care of the postoperative patient.

Site.

The recovery ward should be situated adjacent to the theatre suite, to minimize the distance which the patient has to travel after operation.

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At the same time it ensures that expert medical care is readily available. This may not always be practicable when operating theatres are scattered throughout a hospital, and a central position should then be selected. This latter choice of site brings one distinct disadvantage in that the journey from the operating theatre to the recovery ward may be long, but the risk can be lessened if senior members of the nursing staff belonging to the recovery ward collect and accompany the patient.

A ward of this nature was established at Sydney Hospital six years ago, when it was considered that the advantages would be so great that each surgical team offered to relinquish one bed to be used for recovery and intensive therapy purposes. A general reorganization allowed a central ward containing fourteen beds to be equipped and staffed as a recovery and resuscitation ward.

**Size and structure.**

The number of beds will depend on whether it is to be used solely as a recovery room or as a combined unit. In the former role probably two beds per theatre will suffice. For the latter purpose its size will be determined by the number of patients undergoing surgery each day, the type of surgery performed and also the number of traumatic cases admitted to the hospital.

Air conditioning is desirable and the ward temperature and humidity should be maintained at the level existing in the operating theatres. This factor is more important during the summer months when the sudden transfer of a patient from a cool operating theatre to a very warm atmosphere may have a deleterious effect on his vasomotor mechanisms.

Accurate judgement of the patient’s colour is important; thus blue or green walls and fluorescent lighting should be avoided. Acoustically, tiled ceilings help considerably in keeping the noise to a minimum. Dividing curtains are an advantage when instituting postoperative treatment, particularly if male and female patients are being nursed in the same ward, but they should not be drawn unless active treatment is being carried out as they can easily impede the vision down the entire ward.

The desk of the sister-in-charge should be in the ward itself and preferably at one end in order that all beds are clearly visible. The telephone and some form of alarm system to the theatres should be positioned on this desk.

**Medical staff.**

It is important that there be an administrator appointed to the ward to supervise the day-to-day running and to maintain the standard and working order of the equipment. He should be a member of the full-time staff and probably the many needs of such a post are best met by an anaesthetist. Of course, this does not mean that patients entering the ward pass out of the care of their own surgeons or physicians, and it must be understood that the responsibility of, and the supervision by, the latter or their residents continue in the recovery ward. This then removes the need for a resident medical officer attached solely to the ward.

**Nursing staff.**

The success of this venture very largely depends on the standard of the nursing staff, and selection and training of this personnel are vital. Nursing of this type demands trainees of a special calibre with an interest in and aptitude for this class of work. Preferably the nursing staff should comprise one or two trained sisters supervising a team of senior trainee nurses throughout the 24-hour period. Nursing administration must ensure that every nurse spends a reasonable period in this ward, just as she does in the operating theatres, to become familiar with the proper care of postoperative patients and those requiring intensive therapy.

**Equipment.**

All emergency equipment should be readily accessible; this applies equally to laryngoscopes, bronchoscopes, endotracheal tubes, tracheotomy sets, intravenous therapy sets, angle-poised spotlights, all emergency drugs and oxygen. Suction should be piped to an outlet beside each bed. X-ray equipment should be close at hand and viewing boxes present in the ward. Ventilators should be part of the standard equipment.

In the author’s opinion trolley beds to transport the patient from the theatre and for use in the ward are essential. These should be stoutly constructed with large castors and a quick and efficient tipping mechanism operable from either end. The head end should be under separate control in order that the patients may be sat up by
degrees and with ease. A width of 2 ft. 6 in. and a 4 in. rubber mattress are necessary for the comfortable nursing of the long-term patient. The ends of the bed must be quickly removable in case of emergency and the cot sides elevated and depressed with ease. Intravenous transfusion stands should be incorporated as should also be a bracket to accommodate an oxygen cylinder.

Routine of patient care.

The anaesthetist, on his pre-operative visit, should inform the patient that he will be sent to the recovery ward following his operation.

It is to be remembered that each patient who enters the ward is new and often an unknown quantity to the nursing personnel. At Sydney Hospital the operating lists for the day are sent to the recovery ward so that the sister in charge has an idea what to expect. If the patient has a complicating medical condition such as diabetes, asthma, hypertension, or is having steroid therapy, these facts are printed beside their names on the operating list by the resident medical officer concerned. The patient is escorted from the theatre by a nurse from the recovery ward, and the post-operative instructions are written by the anaesthetist and the surgeon and, if appropriate, further verbal directions are given to this nurse. The clarity of these instructions is vital because, as previously stated, this patient is unknown to the recovery ward sister.

We endeavour to keep the males separate from the females at either end of the ward, but this is not a major problem.

On arrival, the escorting nurse transfers her instructions to the sister and the patient's blood pressure, pulse rate and temperature are recorded immediately and thereafter at regular intervals depending upon the instructions from the anaesthetist. Usually, the patient remains until the first postoperative dose of medication has been administered and its effect assessed. After uncomplicated routine surgery he is then cleared by a medical officer—if possible the anaesthetist. If the surgery has been of a major nature, or the
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patient's condition is unsatisfactory, his length of stay is prolonged until such time as a surgeon and anaesthetist are satisfied. In some cases this may extend to 36 or 48 hours or longer, and if the ward is being used for both recovery and intensive therapy, the number of beds must be sufficient to accommodate this eventuality. It should be noted that the decision to move a patient back to his own ward must be made by a medical officer concerned in the care of that patient.

In turn, notes on the treatment and the progress of the patient must be documented clearly by the recovery ward staff and these should accompany him when he returns to his own ward, otherwise a severe lapse in the continuity of the postoperative therapy may occur.

At Sydney Hospital all postoperative cases, with very few exceptions, are returned to the recovery and resuscitation ward and afforded this type of care.

If the ward is being used in a combined manner it must be prepared to accept the admission of the shocked case from the casualty department and two beds should always be left unoccupied for this purpose. It seems that if a hospital does not possess a casualty or urgent admission ward, these patients can be treated most efficaciously and speedily with the facilities available in this combined unit. Doubt sometimes has been expressed whether it is advisable to nurse a postoperative case near one newly admitted from the street, but no rise in wound infection has been noted in Sydney Hospital since this scheme was adopted, and in the author's opinion cross infection need not be feared from this source.

Usually no notice is given of the admission of the shocked case and of course the ward must be equipped and staffed to meet any such emergency; also it is ideally set up for the rapid treatment of mass casualties.

Prior to the establishment of a respiratory unit, it was considered that all patients suffering from gross respiratory insufficiency or failure who required constant supervision and often the use of a ventilator, were best admitted to the recovery ward. A number of such cases were successfully treated.

Another use to which the ward has been put is the reception of admissions at night in an endeavour to keep the other wards quieter, and to group the patients requiring more urgent attention during the night. These patients are then sent to the general wards as soon as possible the following morning.

Disadvantages.

It has been argued that the establishment of a recovery and resuscitation ward in a hospital will of necessity lead to interruption of patient care by the general ward staff. With the shortened number of hours in the nursing week there is already lack of continuity, and there is little doubt that a recovery ward affords a much safer and more efficient service during the postoperative period. This lack of continuity is the price that must always be paid in establishing any type of group nursing. This argument obtains whether the recovery and intensive therapy services are grouped separately or as a single unit.

Another disadvantage can be said to exist in that the patients recover in an unfamiliar atmosphere. As previously stated, this can be overcome during the pre-operative visit when the anaesthetist should inform the patient that after his operation he will become aware of his surroundings in the recovery ward and this is particularly important in the case of children.

ACKNOWLEDGMENT

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REFERENCES


Pask, E. A. (1955). Committee on deaths associated with anaesthesia: review of cases where post-operative care was inadequate to meet the circumstances which arose. Anaesthesia, 10, 4.

SOMMAIRE

L’établissement et la direction d’un service de réanimation ont été discutés, avec les buts, avantages et inconvénients, la structure, composition et l’équipement. Le service qui fonctionne au Sydney Hospital depuis 6 ans et qui a apporté un grand bienfait aux malades, au chirurgien et à l’anesthésiste a été décrit comme exemple de ce genre de section hospitalière.

ZUSAMMENFASSUNG

Die Einrichtung und Leitung einer Station für die postnarkotische Aufwachphase mit ihren Zielen, Vorteilen und Nachteilen, Struktur, Aufbau und Ausrüstung wird besprochen. Die Station, die im Krankenhaus Sidney seit über 6 Jahren zum großen Nutzen der Patienten, Chirurgen und Anästhesisten besteht, wird als Musterbeispiel einer solchen Art von Station beschrieben.