

Titration of drugs for desired effect and observation of alveoli saturation of inhalational agents is necessary.

### Intervention

Preoperative aerosol, steroidal treatments and aspiration prophylaxis may be ordered. An awake intubation may be planned and/or the use of cricoid pressure.

### Anesthetic Technique

Once a thorough assessment is complete the anesthetic technique is selected.

Regional anaesthesia is commonly the technique of choice in this population for several reasons. Dose requirements for regionals; as with generals; is reduced due to decreased CNS activity, less myelin sheath covering the neurons, a decrease in vertebral column height and therefore more rapid spread of the drug. Intravenous agents as well as inhalational anesthetics need to be adjusted due the aging process. The patient may have concomitant diseases that would increase their risk for general anaesthesia. There is less cardiorespiratory compromise with regional blockade as well as a faster recovery from the medications postoperatively allowing for a more oriented and cooperative patient. There is less bloodloss as well as less risk of emboli formation. Spinal anesthetics have been studied and show a decrease in mortality rates from deep vein thromboses (DVT) in hip surgery. Spinal and epidural techniques are ideal for hip surgery and transurethral prostatectomies, to name a few. The blockade can, however, cause profound hypotension and cardiovascular collapse. The anesthetist must be prepared for this possibility. Often these patients require intra-arterial blood pressure monitoring and a bolus of crystalloid (e.g. Ringers Lactate) intravenous solution preoperatively to prevent a hypotensive episode. Usually a vasopressor (e.g. Phenylephrine) is prepared and attached to the I.V. line for immediate availability for pressure control. Epidural anaesthesia has an advantage over spinal in that there is a more gradual blood pressure drop as absorption is slower than the spinal route. Temperature is important to maintain with regional blockade. A warm blanket to cover the arms is helpful.

In the disoriented or uncooperative patient, or when the surgical approach warrants, a general anaesthesia is usually the choice. Due to a decrease in cardiac output one can expect a delayed onset of action. Risks that have been mentioned previously; such as decreased liver and renal function, airway protection from aspiration, the need for higher oxygen content inspired, close hemodynamic monitoring,

hypovolemia, hypothermia, etc... need to be prevented. Careful positioning and padding is essential for prevention of injury and tissue breakdown, as well as ongoing treatment and awareness of concomitant diseases the patient may have.

Postoperatively, delayed recovery from anaesthesia can occur. Hypoxia is common, therefore oxygen supplementation is necessary postoperatively. Continual reorientation will help alleviate confusion and uncooperativeness. Access to their hearing aids may be helpful. Assessment of their fluid balance and electrolyte levels will assist in evaluating their status. Shivering can increase oxygen demand and cardiac workload, therefore, Hypothermia should be avoided. Among the most frequent complications are those that are pulmonary in nature. Suctioning before removal of the endotracheal tube and oropharyngeal suctioning are basic methods of ensuring good air exchange. Tenacious sputum and atelectasis of the lung may still cause postoperative complications. Deep breathing and coughing is important, as well as frequent position changes. ECG monitoring should be done postoperatively, especially when there is a possibility of myocardial ischemia. Narcotics should be given with caution due to respiratory depression. Pulse oximetry can be utilized to monitor oxygen saturation levels. Early ambulation and mobilization should be encouraged to prevent DVTs in lower extremities and pelvic vessels and to decrease the incidence of pulmonary infection.

### Conclusion

In conclusion, as the aging population increases our geriatric surgical population increases. Aging is an all encompassing multifactorial process that results in a decreased capacity to adapt. There is a gradual decline in bodily function which is affected by other disease processes that may be present. Optimal anesthetic management in the geriatric patient requires careful preoperative identification and correction of specific conditions, a thorough anesthetic plan tailored to the specific needs of the patient. The anesthetic plan should include prevention and management of postoperative complications. This plan is a collaborative effort of the entire perioperative team.

An understanding of the changes that take place in the elderly will allow for safe and individualized care. In turn we will contribute to increasing the lifespan of our society. We will help our patients to maintain their full physiologic function and as high quality lifestyle as near to the end as possible. (Continued on page 33)

# Continuous Quality Improvement: A Staff Nurse Perspective

By Lynda Wilson, R.N.

As the cost of health care is rising and government funding is falling to an all-time low, hospitals are being forced to evaluate their overall environments. Hospitals are becoming more business-like and are assuming corporate attitudes. It is for these reasons that most health care institutions have made commitments to move towards a Continuous Quality Improvement philosophy. It is hoped that continuous evaluation of the processes will result in improvement in the quality of care to the customers. It is expected that this will eventually lead to lower costs through greater integration and less duplication of activities. This would then be in keeping with the key determinants of health and the principles of the new approaches to the provision of care as established by the Ontario Premier's Council on Health Strategy for establishing reforms in the health care system.

The overall goals include:

- to promote general good health, thus reducing the need for care services in institutions.
- to provide as much care as possible in households and communities.
- to restructure institutional care.

According to the Council this will be accomplished in part by:

- continuous quality improvement using quality assurance mechanisms.
- teamwork in everything.
- customer or patient satisfaction.
- a total quality approach.
- employee empowerment.
- automation.
- innovation by everyone.
- management by vision and values.
- strategic choices.

- developing core competencies (basic, minimal accepted skills).
- focus on the interdependencies in the organization (multidiscipline).

The St. Catharines General Hospital is no exception, in that commitments to quality have been made. During the past year, the administration of the hospital has committed a great deal of time and effort to establish a Continuous Quality Improvement Program (CQI) throughout the hospital. Unfortunately, the atmosphere which resulted from the many layoffs of staff and the job insecurity which has loomed over the staff of the hospital has hindered the pursuit of quality. This atmosphere no doubt is common to all hospitals in Canada. St. Catharines is also a community that has suffered the recession keenly.

It is my belief that the concept of CQI has within its program the means whereby these attitudes and fears can be overcome. In the process, the staff is challenged to make their own decisions about their jobs and to be accountable for those decisions. This will result with our hospital becoming a viable business, a happy place to work, and an institution genuinely pursuing quality care for its customers (the patients, their families, physicians, suppliers, staff and government).

In the Operating Room we have Team Leaders (Resource Nurses) in each specialty area. In addition,

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each of the general staff members has had extra specific duties included in their regular responsibilities (sutures, anaesthetic supplies, instrumentation etc.). Each specialty has over the years been encouraged to develop Goals and Objectives for each year. At the end of each year activities and outcomes have been documented. Although it was not called CQI at the time, our OR and PAR staffs have been encouraged by our unit manager to identify our problems and concerns with the objective of rectifying them. Thus, the process is not totally new to us. Now, however, the process assumes much larger dimensions.

### Essentials of CQI Process

- It is a continuous process which never is to be considered completed.
- There is total involvement (everyone is encouraged to be involved, everyone is encouraged to be committed).
- It is customer driven. They have the right to have input for their own welfare.
- The process can only be accomplished through enhanced communication and teamwork (interdepartmental projects).
- Recommended modifications/solutions can occur at any time, but will require approval by quality council.
- Organizational charts are to become inverted with decisions and responsibilities placed at the employee level.

### CQI Will Involve:

- All staff at all levels (Chiefs & Indians).
- Physicians.
- Board of Governors.
- Patients and their families.

### Results:

- Increased quality of care.
- Satisfied customers.
- Increased productivity.
- Increased worker satisfaction and morale.
- Improved ability to respond to the changing environment.

### Empowerment

In the past management procedures have been shrouded in secrecy (concern with power?). CQI promotes shared management procedures which allow staff to be accountable and responsible for their individual roles. Decisions will be made in the area by

those doing the job. The attitude of the unit manager nevertheless determines the level of success of the system of shared empowerment. The unit manager must have confidence in his/her staff and demonstrate a willingness to allow the initiative for decision-making to pass to those doing the job. In addition, the unit manager must also have confidence and support from administration. When general staffs express ideas, management must listen and respond actively, and not give lip service agreement. This has, in the past, been all too commonly the sort of response which staffs became unhappily familiar with. The climate will allow for mistakes, and the process must do so in order to reduce fear among staff who are simply not used to voicing their opinions and making decisions about their respective jobs.

Under the CQI program, each department is challenged to create a statement of commitment. The staff of the Operating Room and P.A.R. agree to support and concur with:

- The Mission, Philosophy, Vision and Goals of the hospital.
- The Standards of ORNAC and OPANA.
- The Continuous Quality Improvement philosophy as developed by the hospital.

### Statement of Commitment

*St. Catharines General Hospital Operating Room, and Post Anaesthetic Recovery Room - January 1994.*

1. We shall build awareness of the need and opportunity for improvement for ourselves.
2. We shall set our own goals.
3. We shall organize to teach the goals (establish a quality council, identify problems, select projects, appoint teams, designate facilitators) to each other.
4. We shall provide training for our staff.
5. We shall give reports on our progress.
6. We shall give recognition and appreciation to those who participate.
7. We shall communicate our results.
8. We shall encourage everyone on our staff to be involved in order to accomplish quality improvement.
9. We shall recognize that our customers include patients, their families, physicians, other departments and ourselves. We recognize that our customers must have input in order to have satisfaction.
10. We, as perioperative nurses, shall make the care we deliver more evident. Our documentation will reflect the identification of customer goals, outcomes and nursing intervention. This theory-based nursing diagnosis will then give quantifiable evidence of the quality in the care we deliver.

### How We Got Started

1. A CQI resource nurse in the O.R. was established. As I had been the Quality Assurance resources person previously, I continued in this developing role.

2. Education: Along with another staff member I was given the opportunity by the unit manager to attend a three session workshop.

We also attended a three day session "TQI - An Introductory Course", given by the Hospital Education Services Department.

3. Together with another staff nurse from our department I was assigned to a hospital-wide TQI project, Sharps/Foreign Objects in the Laundry. The OR was the pilot area that was studied initially.

### Lessons Learned

- We became aware of other departments and their concerns.
- CQI education was a plus.
- Overall sense of teamwork is important (Laundry and O.R.).
- Friendships have developed, resulting in more accurate communication.
- Recognition of a common goal - Continuous Quality Improvement.
- The process was fun - an excellent group.

### Outcome of the CQI Project

A hospital wide educational program or awareness program was developed. The program included a video, logo signs, a picture display, a collection of the inappropriate articles found. A travelling "show" was created to make hospital employees appreciate their individual responsibilities to the laundry staff. This method was very successful.

### Considerations Before Implementation

If the group was to be successful in implementing a quality program in the OR, every staff member would have to become involved. We also needed to clean house a little before we could get to the "nitty gritty." Many of our policies and protocols needed reviewing and revising. Manuals needed updating. We were missing some of the more recent protocols that had become standard in the practice of perioperative care.

Starting the process required that the following considerations be dealt with: What are the current standards of practice? Are we meeting these? Can we do it better? This can apply to everything and everyone in the unit!

The members of the staffs of the OR and PAR were assigned to a small group. (Some groups have as few as two members). Each group had a statement of Opportunity for Improvement to consider and work on.

### PROJECT EXAMPLE - 1

**Statement -** "The current PAR record is outdated and revision is necessary".

### EXPECTED OUTPUT OF TEAM:

- Examine PAR records vis a vis current OPANA Standards of Practice.
- Examine and compare other PAR records.
- Create a St. Catharines General Hospital record compatible with the current standards of practice.

### ANTICIPATED MEASURES OF SUCCESS:

- Improved documentation and record keeping.
- Improved patient care.
- Improved communication amongst PAR staff, anaesthetists and staff on surgical units.

### PROJECT EXAMPLE - 2

**Statement -** "The pre-operative check list and the OR record are outdated and need revision.

Nursing Diagnosis and Nursing Process are vital to the future of nursing and perioperative nursing and must form a part of our documentation".

### EXPECTED OUTPUT OF TEAM:

- Examine the Pre-operative check list and OR record vis a vis the ORNAC Standards of Practice and the records of several other hospitals.
- Create a hospital pre-operative check list and OR record in keeping with our own requirements and compatible with our computer system within the recommended standards of practice.

### ANTICIPATED MEASURES OF SUCCESS:

- Improved documentation and record keeping.
- Improved patient care and satisfaction.

- More efficient data collection.
- Improved communication between OR and PAR staffs.
- Prove by documentation that OR nursing is vital to the future of perioperative nursing practice. Similar Statements of Opportunity for improvement included a review and revision of the following: PAR Record, Skin Prep. Manual, Disaster Manual, Organ Retrieval Protocol, OR Policy and Procedure Manual, Malignant Hyperthermia Protocol, Abnormal Cholinesterase Protocol, Patient Reception Manuals, Standardization of Instrument and Bundle Picking practises, and the Establishment of a Latex Allergy Protocol.

### Personal Observations

I am not certain that the methods that have been implemented in our OR are in accordance with the established processes regarding CQI. Nevertheless, amazing things are beginning to happen. Initially the response from staff members was varied: "There is no time!"; "There are not enough people!"; "Why fix it if it is not broken". These are valid concerns. We are, in fact, currently required to do a lot more with less. Nevertheless, we are getting things done and we are often surprised to discover that we have strong feelings of pride in the projects which we have completed. Overall, an environment which was dull and unchanging is becoming quite progressive and professional.

### Mistakes So Far

- Mistakes must be regarded as opportunities for learning, and this attitude allows for creativity.
- *Cart before the Horse:* The staff as a whole must be educated on the CQI philosophy prior to its implementation. Thus, we will all be on the same level of understanding at the same time. If this is not the case, the development of the process will be delayed and/ or misdirected .
  - One project which we chose proved to be too large to handle until we have a better overall insight into the CQI process. The group involved was too large, and it was too difficult to organize meetings within working hours. This project is currently on hold for our unit.

- It is naive to believe that all projects can be accomplished during working hours.
- The hospital administration must acknowledge that most of the projects have required at least some time spent outside of working hours. The reality is that we are indeed oftentimes short on staffing.

### Recommended CQI Development Methods

- A portion of staff inservice (staff meeting) is devoted to CQI Education.
- CQI Bulletin Board - information of ongoing projects in the hospital displayed for all to read.
- Recognition Bulletin Board: projects and ideas are displayed.
- Make sure that each project team has the opportunity to report on their accomplishments.
- Encourage staff who have completed projects to come up with new statements of opportunity for improvement and implement them.
- Small successes will encourage everyone to become involved - no one really wants to be left out or left behind.
- Don't forget to use other established knowledge and be prepared to share what you have learned .
- Use the regional Operating Room Nurses Association, the Provincial (ORNAO), The Canadian Association (ORNAC), OPANA and RNAO as resources that are easy to access.
- It is not necessary to "re-invent the wheel".
- Read, Listen and Communicate.
- We must learn to work smarter, not harder within the scope and limitations of health care today.

### The Future of CQI

- What I would like to see is the following:
- Establishment of a quality council within our own unit,
  - Officer positions in the council should be **rotating**, so as to prevent the establishment of "power" plants within the unit.
  - An Education Committee should be set up to review current literature available to present at staff meetings (i.e. *Canadian Operating Room Nursing Journal, and the AORN Journal*).
  - A Liaison Committee should be set up to visit and communicate with other units in hospital ( two-way communication).

- Peer Evaluation is a difficult concept which requires TLC (tender loving consideration) which could spell disaster if not handled correctly.
- Active physician participation, along with a physician representation on our Quality Council.

### Conclusion

Is the Canadian Health Care System doomed? The government has forced hospitals to cut costs in part by implementing continuous quality improvement programs. I believe that this continuous improvement process can work if the government remains consistent in its reform policies and health care institutions can actually allow the employees to do the jobs for which they are trained.

I challenge you, employees of health care institutions, to get on board. Know what CQI is. Become involved, assertive and empowered. Do not sit in your staff lounges and complain about everything. We have finally been given some clout and it is up to us to run with it.

Remember that CQI is employee-focused and it is an on-going process. You, too, may be a patient someday.

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### Special Considerations of the Elderly Patient Requiring Anesthesia -

Continued from page 28

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### Clarification to the article:

"Fluid Replacement Therapy and Perioperative Management" by Pat Corey-Plett published in this journal, Vol. 12, No. 4, Nov./Dec., 1994, pages 18-21.

Thank you to my conscientious and studious colleagues at St. Boniface General Hospital who questioned my discussion on blood products and compatibility. Submitted by: Pat Corey-Plett .

Blood Type:	Surface Antigens:	Serum Antibodies:	Donors:
O (universal donor)	no ABO surface antigens	Anti A & Anti B	O
A	A	Anti B	O & A
B	B	Anti A	O & B
AB (universal recipient)	A & B	no ABO antibodies	O,A,B,AB

Type O blood is used as emergency blood when the patient's group is not known. There is very little of the serum antibodies, therefore a reaction is very remote. Group O has no A or B surface antigens on the RBC, therefore it will not be rejected by other groups. Rh(D) positive or negative: 85% of the population is Rh positive. Studies show that in an emergent resuscitation, uncrossmatched group O packed cells is safe.