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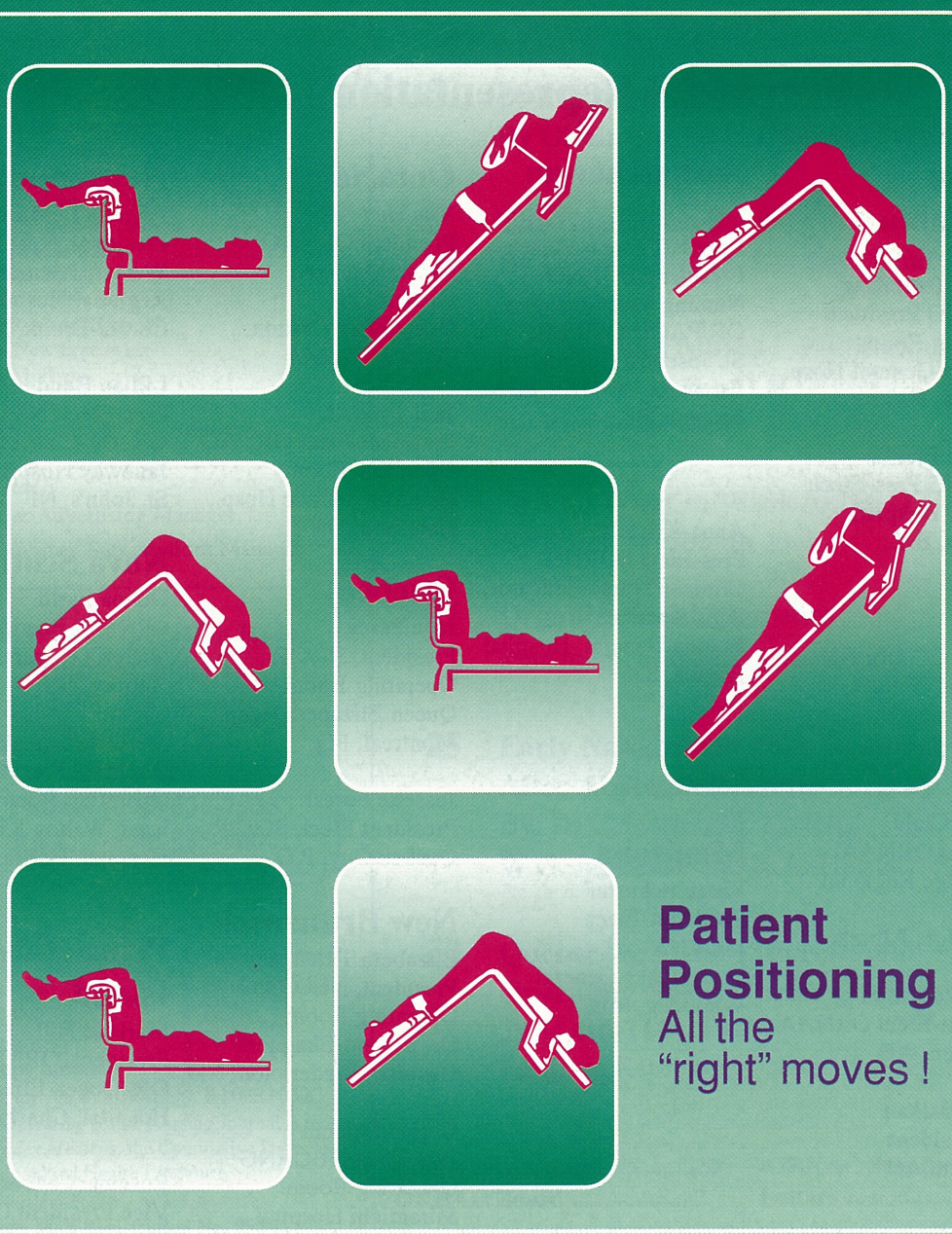

Patient Positioning

All the "right" moves !

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Journeys and the Joy of Circles

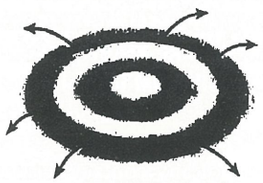
By Gloria Stephens

When one sets out on a journey, one usually checks to see that they have all the ingredients to make a successful trip - maps, tickets, reservations, a plan. Some may think of every detail, others need guidance and assurance to set them on the right course.

To have a successful trip we need to trust many people: the map makers, road signs, luggage handlers, etc. We put ourselves basically at the mercy of others. How and in what condition we arrive at our destination depends on our plan and our organization, but a great deal of our success depends upon our FAITH and our TRUST in others.

Consider yourselves a pebble thrown into a pool - we make small ripples.

But the more information the pebble contains the larger the pebble becomes, until it is the size of a rock which, when thrown into the pool, makes ever enlarging circles.



As individual nurses, our "rock" may have POSITIVE - outgoing vibrations...

or NEGATIVE - internal vibrations

Both directions may be based on ASSUMPTIONS. Assumptions should first be checked out - to ensure that an assumption is appropriate to the behaviour...before any behaviour change is contemplated.

Flying across Canada, you can see below a beautiful structured landscape. What a pattern of life, I thought. Looking more closely, I suddenly realized that patterns showed independent circles and squares, sometimes connected by waterways and roads. The circles appeared to be connected, even though occasionally half the circle was dark and half light.

It also occurred to me that within the circle there were NO CORNERS to be locked into. Yes, with circles, you may return to your starting point and have another opportunity to start afresh.

When we start again we will hopefully enlarge the circle and like the "positive rock" to make positive assumptions and therefore have positive behaviours.

The success of any journey - whether it be personal or as a professional team, is the fulfilment of its expressed commitment and goals.

As operating room nurses, we have a VIP commitment, which is VISION, INVOLVEMENT and being PERSISTENT in our mission. That is, to harness all the individual resources within the circle and hopefully, this can be done in tandem and harmoniously. However, as in any "family" - and as operating room nurses we are indeed a family - there will be differences of opinion.

The analogy of the pebble/rock in the pond and the enlarging circles, is to view those differences as challenges, to energize, to accomplish and fulfil our responsibilities and role as an operating room nurses.

Where are we going? Do we know where we are now? Are we going forward collectively? Important questions to think about as we enter the journey of a new year. Let us make this journey a successful one by pulling together, and putting our positive energies toward formulating the future of operating room nursing and our National organization - ORNAC.

There is a saying:

"Don't walk in front of me, I may not follow
Don't walk behind me, I may not lead
Just walk beside me and be my friend"

And so the journeys and circles continue into infinity.

Gloria Stephens is President of the Operating Room Nurses Association of Canada and a Nurse Clinician in the Operating Room, St. Pauls' Hospital, Vancouver.

The Unsuspected Allergy

By Donna Rawlins, Sue Smith & Judi Tyndall

The unsuspected allergy is a case study of a patient who had an anaphylactic reaction under anaesthesia. This scenario prompted the development of a program that considers potential consumer needs, concerns and ensures patient expectations are identified and met.

Case Scenario

Patient "X", a health care professional, was admitted to the hospital for routine abdominal surgery. Her patient history suggested past problems with contact dermatitis when exposed to hospital gloves, but otherwise no evidence of a previous allergic response to latex.

Induction of anaesthesia was successfully completed, but approximately fifteen minutes into the procedure, the patient's blood pressure decreased, her heart rate increased and upper body cutaneous flushing occurred. When the anaesthetist diagnosed an anaphylactic reaction she was immediately treated with a bolus of epinephrine and the abdominal incision was closed.

After a post-operative investigation at the Anaesthetic Allergy Clinic, a latex allergy was determined to be the precipitating event causing the anaphylactic reaction. This discovery ruled out the original hypothesis that this patient's response was drug related.

Health Care Issues

"Natural rubber is obtained from the tree *Havae Brasiliensis*. Latex is the milky sap from the tree. It is filtered to remove particulate debris and then preserved by adding either ammonia or sodium sulfite,"(Spaner, Dolovich, Tarlo, 1989).

Latex is a common component of equipment used not only in our hospital setting, but specifically, it is an essential element used within the surgical environment. Although reported cases of life-threatening anaphylactic reactions to latex are rare, health care professionals should be aware of this potential problem for patients who present with an allergy to latex products,(Gerber, Jorg, Zbinden, Seger & Dangel 1989, p. 800). Ultimately, "heightened awareness of this problem will identify those patients at risk and potentially avoid a catastrophic event" during the perioperative or post-operative period, (Nguyen, Burns, Shapiro, Mayo, Murrey & Mitchell 1991, p.573).

Problem Identification

Individuals such as health care providers routinely exposed to latex devices and patients with a history of chronic contact with latex products are especially susceptible.

Pre-operative assessment of these patient's should include a history of any contact dermatitis to rubber gloves or tingling and swelling of the tongue when blowing up balloons.

The patient population most at risk have had a past allergic response to latex and are scheduled for invasive procedures such as surgery, catheterizations, vaginal exams or dental work involving prolonged internal contact with latex products,(Nguyen et al 1991; Leynadier, Pecquet & Dry 1989; Sussman, Tarlo, Dolovich, 1991).

As the literature suggests, the severest reactions occurred after contact with vaginal, buccal or peritoneal mucous membranes, (Sussman et al 1991).

During operative procedures, the surgeon's gloves are constantly in contact with mucous membranes. This exposure to tissue and blood allows the latex antigen to be transferred from the rubber and be absorbed into the circulation causing severe systemic reactions such as tachycardia, hypotension, bronchospasm and upper body flushing, (Nguyen et al 1991; Sussman et al 1991; Gerber et al 1989). After reviewing the literature and comparing the overwhelming similarities to our case scenario, we understood the patient's previous physiological response to surgery, and recognized the need for a collaborative plan of care to prepare this patient for future surgery. Consequently, nurses from the Operating Room, Post-Anaesthetic Recovery Room and Surgical Ward met to develop an individualized plan of care to meet the patient's preoperative, perioperative and postoperative needs. An example of this plan of care is enclosed in Appendix A, The Perioperative Plan, and Appendix B, The Pre and Post-operative Plan. Our goal was to reduce or eliminate patient exposure to products containing latex and monitor the patient for any evidence of anaphylactic response.



Authors

Donna Rawlins, R.N., B.Sc.N., (photo left) is a Nurse Clinician for General Surgery, Urology and Gynecology; Sue Smith, R.N., (centre) is a Resource Nurse in Laser, Gynecology and Oncology;and Judi Tyndall, R.N., (right) is a Nurse Clinician, Operating Room at the Hamilton Civic Hospitals, Henderson Division, Hamilton, Ontario.

Outcome

Patient X had surgery without experiencing any systemic anaphylactic response related to her latex allergy.

The staff nurses from all areas were pleased to see that their efforts to provide a "latex-free" environment to ensure patient safety had been successful. We were eager to initiate and co-ordinate this patient's plan of care. In addition, our data collection has given us the opportunity to develop a Standard of Care for future operative cases in which sensitization or allergy to latex products is a concern. This program will enhance patient care because we are now prepared to identify a patient population that may be at risk for severe anaphylaxis secondary to latex allergies. In addition we can individualize our Standard of Care to meet each patient's unique needs.

In this scenario, we were able to utilize the research to assist with problem identification and determine appropriate interventions to meet our mutually-defined goals. Since patient participation in care planning was an integral part of our multidisciplinary conferences, we believe that this consumer's perception of our care was enhanced. The patient identified that her anxiety was greatly reduced because of the care co-ordinated by the nursing staff. She was also encouraged to participate in her own care which gave her a sense of control in a situation that initially seemed frightening and life-threatening.

Conclusion

We believe that our collaboration in care planning for Patient X has demonstrated the quality patient care our health care consumers expect. In addition, the participation of the patient in her own care planning has ensured consumer satisfaction through mutual goal attainment and positively influenced the patient's perception of the health care system.

Through this experience, we are expanding our surgical care plan to a multidisciplinary hospital-wide protocol to deal with latex allergies on a more global basis.

References

Gerber, A., Jorg, W., Zbinden, S., Seger, R., Dangel, P. (1989) Severe Intraoperative Anaphylaxis to Surgical Gloves: Latex Allergy, An Unfamiliar Condition. *Anaethesiology,* 71(5):800-802.

Leynadier, F., Pecquet, C., Dry, J. (1989) Anaphylaxis to Latex During Surgery. *Anaesthesia,* 44:547-550.

Nguyen, D., Burns, M., Shapiro, G., Mayo, M., Murrey, M., Mitchell, M. (1991) Intraoperative Cardiovascular Collapse Secondary to Latex Allergy. *The Journal of Urology,* 146: 571-754.

Sussman, G., Tarlo, S., Dolovich, J. (1991) The Spectrum of IgE-mediated Responses to Latex. *Journal of American Medical Association,* 265 (21): 2844-2847.

Spaner, D., Dolovich, J., Tarlo, S. (1989) Hypersensitivity to Natural Latex. *Journal of Allergy and Clinical Immunology,* 83(6): 1135-1137

APPENDIX A

Perioperative Nursing Care Plan for Patient with Latex Allergy

NURSING DIAGNOSIS	GOAL	NURSING INTERVENTIONS
1. Potential for anaphylatic response related to latex allergy	**1.** Patient will not experience anaphylatic reaction (mutually). **2.** Staff will reduce and/or eliminate patient's exposure to latex (nursing).	**1.** Check all equipment and supplies to be used in the OR (See list) **2.** Provide an OR where airborne latex particles will be kept to a minimum. Surgery to be done using the Laminar Air Flow for the entire set-up, induction and surgery. **3.** Co-ordinate with Respiratory Technology and Anaesthesia to provide latex free equipment. (See list below) **4.** Perioperative Nurse will visit the patient pre-op and post-op. **5.** OR will co-ordinate with the Ward to monitor use of latex products pre-op and post-op.

It is important to ensure that any item coming in contact with mucous membranes, intravenously or through incisions, should be latex free. In our Operating Room, we have researched all products used in General, Urology, ENT, Dental, Orthopaedic, Gynecology, Oncology and Laser surgery. We suggest that each hospital review their equipment and products for the presence of Latex. Product adaptation is essential because each hospital would utilize different manufacturers or suppliers. We are in the process of checking all companies and obtaining a letter from each stating the contents of their products. We plan to publish our list and hospital protocol in a future issue of the *Canadian Operating Room Nursing Journal.*

Equipment and Supplies to be Used

1. Gloves - Vinyl bulk and sterile non-latex gloves to be used.
2. Sponges.
3. Suction tubing
4. Catheters - in and out catheter vinyl Silicone Foley Catheter
5. Cautery and Grounding pad.
6. Disposable drapes.
7. Suture material.
8. O.R. Masks.
9. O.R. bed, pillows and stretcher.
10. Dressings.
11. Camera Drapes.
12. Cytology Brushes.
13. Cesium Applicators.
14. Esmark Bandages.
15. Femoral Brushes.
16. Hemodialysis Equipment.
17. Hichman Catheters.
18. Endoscopic Washers.
19. Positioning devices i.e., bean bags.
20. Irrigation Sets i.e., in Total Hips.
21. Stockinette.
22. Implants in Tympanic Membranes.
23. Mouth Gags.
24. Drains.
25. PCA Tubing.
26. Retention Rubbers (silicone).
27. Rubber Shods (silicone).
28. Stapling Equipment.
29. Urinary Investigational Catheters.
30. Asysto Syringes.

Anaesthetic Equipment:

Patient Will Preferably Receive Epidual or Spinal Anaesthetic

1. Spinal and Epidural Catheters.
2. Gas Machine - Filter to be used to block any airborne latex particles from the machine if a general anaesthetic is necessary.
3. Endotracheal tubes.
4. Nasal Oxygen specials.
5. Syringes - glass syringes will be used.
6. Monitor Discs
7. Head strap.
8. Breathing masks - plastic mask **THIS MASK IS TO FOLLOW THE PATIENT TO RECOVERY ROOM AND THE WARD.**
9. AMBU Bag.
10. Tourniquet - Use a Webril beneath tourniquet or use a velcro tourniquet.
11. I.V. Tubing.
12. Tapes.
13. Temperature probes.
14. Arterial Lines and CVP Lines, Swan Ganz Catheters.
15. Blood Bags.

APPENDIX B

Pre/post-operative Nursing Care Plan for Latex Allergy

NURSING DIAGNOSIS	GOAL	NURSING INTERVENTIONS	EVALUATION
Potential anaphylatic response related to latex allergy	Patient will not experience anaphylactic reaction (mutual) Staff will reduce and/or eliminate patient's exposure to latex (nursing)	- collaborate with other health care professionals to reduce exposure to latex&equipment containing latex - check all equipment & supplies to be used pre/post operatively on ward - patient will be kept in a private room where airborne latex particles will be kept to a minimum - Perioperative nurse will visit the patient pre/post operatively to alleviate anxiety - the following equipment must be deemed latex-free and rubber-free to be used for nursing care: a) vinyl gloves in room b) dressings c) oxygen tubing including resuscitation equipment d) syringes - glass recommended e) enema kit, rectal tube, pre-op prep sponge f) urinary catheters - indwelling and in/out must be silicone coated g) dietary tray, razor and hospital mattress h) thermometer - use glass in room,or latex-free probe i) IV equipment, IV tape j) BP cuff & stethoscope - rubber sections may contain latex; but can be used for short periods. **Do Not Leave These Areas In Contact With The Patient's Skin** k) patient to bring in own pillow n) patient may have PCA therapy post-op for pain management, thus reducing the need for extra glass syringes.	

All the right moves!

Positioning the Patient in the OR

By Regina Leonard, R.N., B.Sc.N., M.Ed.

Patient care and safety in the OR is a joint responsibility of nurses, surgeons and anaesthetists. The perioperative nurse, however, is becoming more and more recognized as the main manager of the OR patient's care co-ordination. Although other personnel may change from case to case, the nurse is the constant and consistent personnel member in the OR theatre. The responsibility for patient care co-ordination includes the management of patient positioning.

Advance care planning for surgical positioning assures team preparation for the patient, thus avoiding or minimizing patient delays, and avoiding prolonged anaesthesia and surgical time. The goal of OR planning is that the patient will receive continuous, efficient, safe, quality care in the OR. Once the care plan is defined, implementation of the planned actions is more efficient. Throughout the procedure, on-going evaluation occurs to ensure that all is in order from the patient, nursing and medical perspective. At the completion of the surgery, the patient's overall surgical experience is re-assessed for overall integrity and needs, and the case is re-assessed for the purpose of noting what was done well and what, if anything, could be improved.

Assessment, planning, implementing, and evaluation become quite automatic to the experienced surgical team. The use of procedure preference lists and team communication are but two effective tools that can be used to avoid errors, discrepancies, and patient injury. The major concerns for injury and liability during the OR surgical experience are foreign bodies left in wounds, electrosurgical burns, prep solution burns, and circulatory and nerve impairment due to pressure injuries.

With todays trend toward surgical procedures being completed in outpatient departments, day surgeries, offices, clinics, etc. where local and block anaesthesia are used more frequently, patients are awake for surgery and can more readily alert the caregivers as to their operative concerns including uncomfortable positions. With this trend, the number of positioning-associated problems is expected to decrease. It is in the main operating room, where the already compromised patient is having a lengthy procedure, that positioning of the unconscious patient is more likely to cause injury.

The remainder of this presentation deals with the "rights" of surgical positioning, objectives of positioning, patient assessment, anatomical and physiological integrity, and positioning documentation.

"Rights" of positioning

Right patient

The importance of correct patient identification goes without saying. The patient ID band should be accessible throughout the procedure.

Right operative procedure

It is imperative that the patient demonstrate knowledge about the procedure, that the correct procedure is on the completed consent and doctors' orders, and that the OR team members be knowledgeable regarding the procedure.

Right location

The site of the surgery is to be identified and stated by the patient and on the consent form: is the surgery on the foot, the abdomen, the face, etc.? On which side is the surgery to be performed? If any doubts occur, ensure that the physician and patient are both in agreement as to the location of the surgery.

The nursing personnel need to know and integrate their anatomy and surgical technology with the surgical position. Placing a patient, for a thyroglossal cyst (thinking that the cyst is behind the knee), in a prone position is unacceptable.

Right surgical approach

As perioperative nurses we need to know the surgeon's approach to surgery. A hemorrhoidectomy, for example, can be completed in prone position, lateral position, or variations thereof. It is important to place the patient in the correct position the first time. Patient movements and re-positioning should be limited in order to offset any anaesthetic problem and unnecessary physiological patient disruption.

Right equipment

This relates to the above rights, the need to assess the patient beforehand, and to devise and implement the plan of action. Ensure that equipment is available, functional, and fits this patient's needs. Have enough personnel resources available to place and maneuver the equipment while effecting safe patient practice.

Right documentation

All nursing actions are recorded on the OR nursing record. Note position, side, equipment used, padding completed, deviations, and unusual occurrences. Remember, if it isn't documented, it isn't done.

Objectives of surgical positioning

Maximum patient safety and comfort

The patient is the number one concern in the OR. All efforts of personnel are directed at treating the patient's condition in an efficient, safe, dignified, and comfortable manner. The aim is to have the patient leave the OR free from unintentional injury.

Optimal anaesthetic administration

The anaesthetist needs to access the patient for anaesthetic induction, during maintenance of anaesthesia, and during the reversal stage of anaesthesia. The majority of patients for general anaesthesia are initially placed in supine position and then re-positioned to afford surgical access. Whenever a position is changed, the anaesthetist needs to be notified as changes in physiological conditions can and do occur.

Optimal surgical exposure

The surgeon needs to be able to access the operative site and most times requires surgical assistants to help. The position of the patient should allow freedom for movement and ease of placement for personnel, resources and lighting. It is important that the surgical team is comfortable and located as near as possible to the operative site to facilitate quick, efficient surgery.

Anatomical and physiological integrity

The systems of the body which are most affected by surgical positioning are circulatory, respiratory, integumentary, musculoskeletal, peripheral neural, and vascular. These will be addressed in more detail further on in this article.

Patient dignity

Try and imagine yourself lying on the OR table in that designated position. How would you like to be treated?

Patient assessment

There are several factors to consider when assessing the patient. The following have been selected for brief discussion. The list is not all inclusive and is presented for example only.

Age, weight, sex, medical diagnosis

Let's take the example of a 42-year-old, 110 lb., 5' 2" healthy female and compare her to a 42-year-old, 110 lb., 5' 8" medically compromised male. It is evident that both these patients have unique and very different needs.

Circulatory, respiratory, integumentary, musculoskeletal, peripheral neural, and vascular systems

Areas of deficit and anomalies in these systems need to be identified and accommodated. We are aware that there are several medical diagnoses related to these systems. The patient may have varicosities or ulcers on legs; may be short of breath or a heavy smoker; may have skin that is dry, broken, or displaying a decubitus ulcer; may have severe

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Author:

Regina Leonard, R.N., B.Sc.N., MEd., has extensive operating room experience in clinical, educational and managerial capacities. She has been a speaker at the local and national level for various SPD and operating room education sessions. Her most recent endeavor has been to obtain a Gerontological Nursing Certificate, and to apply this knowledge to the operating room patient. Currently, she is employed at the University of Alberta Hospitals (Edmonton) in the surgical suite.

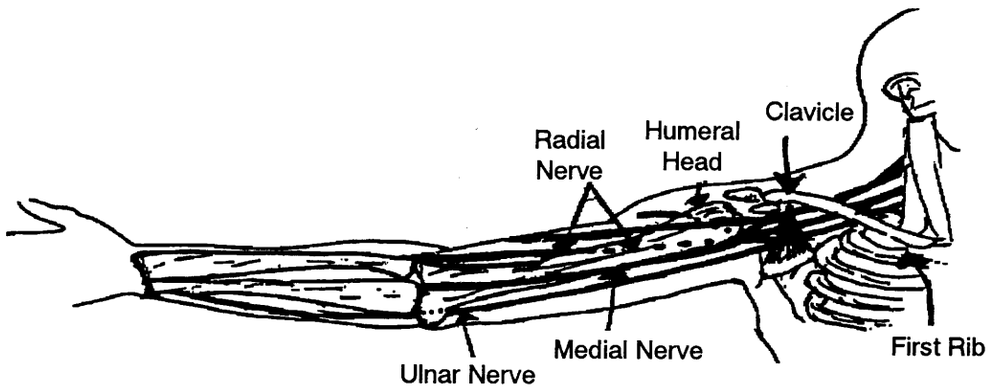

Diagram 1. Brachial Plexus and Peripheral Nerves of Arm

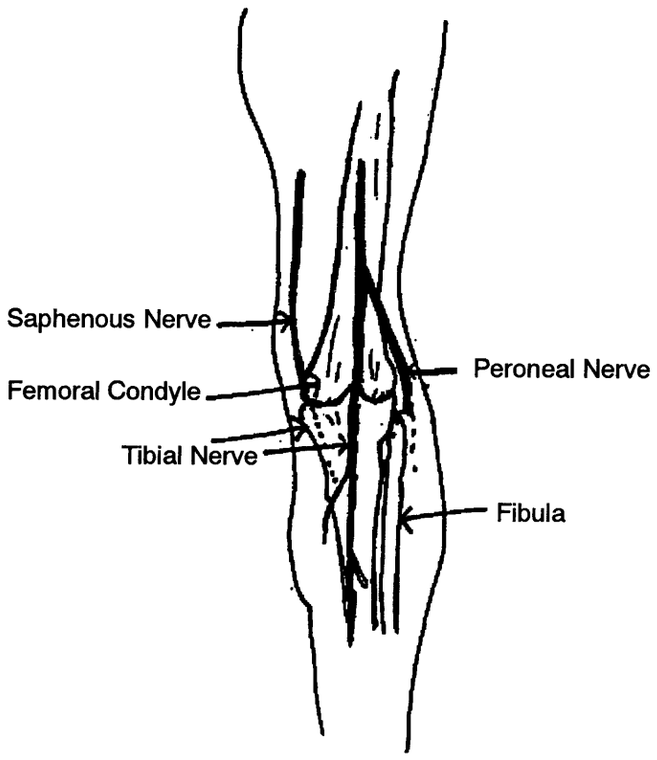

Diagram 2. Peripheral Nerves of Leg

arthritis which limits mobility; and/or may have peripheral neuropathy. These are but a few points of note in planning for the patient's care in the OR.

Sensory ability, restrictions

Patients may demonstrate limitations in hearing, vision, comprehension, development stage. They may be restricted by casts, slings, restraints, and other devices. Patient safety is utmost when facilitating movement and body positions.

Anatomical and physiological integrity

The peripheral nerves most commonly injured during positioning are the brachial plexus, radial, ulnar, medial, peroneal, saphenous, femoral, supraorbital, and facial. A brief overview of each with suggestions for prevention of injury follows. **(See Diagram 1 - Anterior Arm) and (Diagram 2 - Posterior Leg).**

Brachial plexus

This superficial long plexus originates from C5 to T1 and passes along the acromion process and humeral head. It may be compressed by the humeral head, clavicle, first rib and muscles. To offset injury from stretching and compression, ensure that the arm is extended to no more than 90 degrees, that no pressure is placed on the shoulder, and that the head is in anatomical alignment.

Radial nerve

This nerve arises posteriorly from the brachial nerve and supplies innervation to the triceps, forearm, and hands. It may be injured by compression from the anaesthetic screen on the upper arm and from personnel leaning on the upper arm.

Ulnar nerve

The ulnar nerve is located on the medial arm and innervates the third, fourth and fifth digits. (This is the nerve that is struck when we "hit" our funny bone). It may be injured from pressure if the arm hangs over the edge of the surgical table or if the elbow is flexed too much with the arm over the chest. To avoid injury, secure the padded arm at the side with the palm facing the side of the patient, or secure the arm on the padded arm board with the palm facing up.

Medial nerve

This nerve rests in the antecubital space and continues to first, second, and third digits. This nerve is most commonly damaged through injection at this site either by the hypodermic or by the medication infiltration.

Peroneal nerve

The peroneal nerve is situated on the lateral aspect of the knee and traverses the head of the fibula. Injury may occur from pressure of stirrup or when the patient is in a lateral position. Padding of the leg will help offset this injury.

Saphenous nerve

This nerve runs along the medial tibia condyle on the medial aspects of the leg. To avoid injury, pad well between the knees when the patient is in lateral position and avoid placing patient's legs outside of stirrups.

Femoral nerve

This nerve, located in the groin, can be easily injured when wound retractors cause prolonged compression on the nerve. It may also be injured from incorrect lithotomy positioning. Avoid bringing the knees back over the abdomen in lengthy procedures requiring lithotomy and avoid groin pressure in prone position.

Supraorbital and facial nerves

These nerves can be damaged by face masks and mask straps, anaesthetic hoses and connectors, and leaning on the face.

Peripheral Neural summary

Table 1 and Diagram 3 on the following page illustrate a partial summary of the peripheral neural systems which may be affected by surgical positioning. The ares noted with a dot (•) in Table 1 show the most common alert points, indicating that many peripheral nerves may be damaged. The brachial plexus is the most common nerve of concern and injury. The bottom line is to integrate knowledge between anatomy and surgical positions, and to take precautions by padding the patient well, avoiding stretching and compression, and avoiding poor body alignment.

Musculoskeletal summary

In any position there is potential for injury to the musculoskeletal system. Table 2 depicts some, but not all, of the body parts which can be affected by positioning. Note the absence of pubis, coccyx, toes, fingers, etc.; however, all body parts must be considered when positioning a patient. For example,

Table 1

Peripheral Neural

Position	BODY PART	BRACHIAL PLEXUS	RADIAL	MEDIAL	ULNAR	PERONEAL	SAPHENOUS	FEMORAL	SUPRA ORBITAL	FACIAL
Supine - Dorsal	•			•				•		
- Lithotomy	•			•	•	•	•			
- Trendelenberg	•			•						
- Sitting	•			•				•		
Prone - Full	•			•			•	•		
- Jacknife	•	•		•			•	•		
- Kneechest	•			•			•	•		
Lateral - Right	•	•		•	•	•				
- Left	•	•		•	•	•				
- Kidney	•	•		•	•	•				

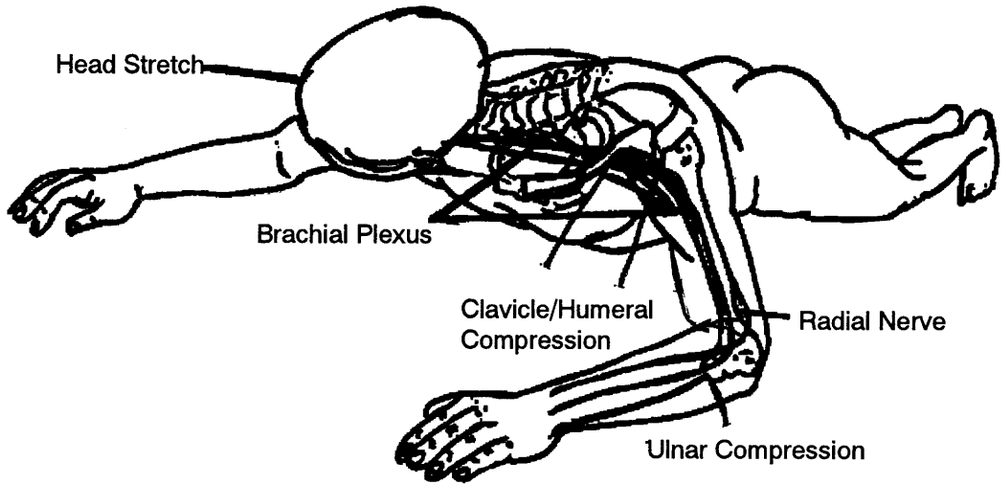

Diagram 3. Brachial Plexus Compromise.

in the supine-dorsal position, note the dotted (•) areas: back of head, heels, ankles, toes, elbows.

Systems summary

In addition to peripheral neural and musculoskeletal systems, attention needs to be paid to the circulatory, respiratory, and integumentary systems during the patient's positioning.

Table 3 depicts the basic surgical positions and the systems which can be affected. The dotted (•) areas illustrate the most frequently affected systems, although all systems can be involved. Note the absence of digestive, genitourinary, and reproductive systems. These are relatively insignificant in effect when positioning the patient for surgery.

Circulatory

Positions should be instituted and maintained such that body perfusion is adequate, blood pressure remains within normals, venous pooling and thrombus formation is avoided, and arterial and venous flow is adequate to all tissue.

Respiratory

Airway access should be optimal, with adequate diaphragmatic movement and avoidance of hypoxia.

Integumentary

Patients should be rolled or lifted - not pulled - along the bed so as to avoid excess pressure on surface tissue and shearing of tissue during movement.

Musculoskeletal

Protect bony prominences with proper padding and maintain body alignment to avoid strain on muscles, and skeletal accessory tissue.

Peripheral neural

Prevent pressure, stretching, obstruction of blood flow, and compression of nerves.

Documentation

From a legal perspective if it is not documented, it is not done. The operating room record should include position and side, equipment and padding, deviations and unusual occurrences.

Position and side

Record the position in which the patient was placed. **(See Tables 1, 2 and 3)** for position descriptions). The documentation should indicate the side if applicable (e.g., left lateral). If the patient is re-positioned during surgery, the position change should be noted.

Table 2

Musculoskeletal

Position	BODY PART	BACK OF HEAD	EYES	HEELS	ANKLES	KNEES	TOES	GENITALIA	ELBOWS
Supine - Dorsal	•		•	•	•	•		•	
- Lithotomy	•							•	
- Trendelenberg	•								
- Sitting			•			•	•	•	
Prone - Full		•		•	•	•	•	•	
- Jacknife		•		•	•	•	•	•	
- Kneechest		•		•	•	•	•	•	
Lateral - Right						•	•	•	
- Left						•	•	•	
- Kidney						•	•	•	

Table 3

Systems / Position	SYSTEMS	CIRCULATORY	RESPIRATORY	INTEGUMENTARY	MUSCULOSKELETAL	PERIPHERAL
Supine - Dorsal			•	•	•	
- Lithotomy	•	•			•	
- Trendelenberg	•	•				
- Sitting	•			•	•	
Prone - Full	•	•			•	
- Jacknife	•	•			•	
- Kneechest	•	•			•	
Lateral - Right	•	•			•	
- Left	•	•			•	
- Kidney	•	•			•	

Equipment and padding

Documentation should include the type of equipment and padding used, and how the patient was secured for the procedure (e.g., legs in stirrups, arms secured on arm boards, anaesthetic screen in place).

Deviations and unusual occurrences

Deviations from the normal should be recorded and reasons noted as to why and on whose orders. An unusual occurrence report should be completed if unexpected events happen. This is filed for patient follow-up, and for personal and hospital protection, and for reference if legal follow-up occurs.

Recommendations

Throughout this article the emphasis has been on ensuring that "all the right moves" are used when positioning the patient in the OR. Discussion has addressed the rights and objectives of positioning, patient assessment, anatomical and physiological integrity, and documentation. In closing, consider the following recommendations:

1. Complete an individual patient assessment: each patient is unique.
2. Have all equipment available and functional.
3. Maintain anatomical alignment of the patient, integrating your knowledge of anatomy with your knowledge of positioning.
4. Be consistent and thorough with documentation.
5. Develop and/or update surgical positioning policies and procedures specific to your patient's needs.
6. H.A.L.T. Ensure C.P.R. is in order. Complete a Head, Arm, Leg, and Torso check to ensure that the integrity of the Circulatory, Peripheral, Respiratory, and other systems is maintained throughout the patient's surgical experience. ■

Bibliography

Biddle, C., & Cannady, M., (1990, August), Surgical positions: effects on cardiovascular respiratory systems; *AORN Journal*, 52(2).

Britt, B., & Gordon, R., (1984), Peripheral nerve injuries associated with anaesthesia; *Canadian Anaesthetists' Society Journal.*

Faster, C., Mukai, E., Breckenridge, F., & Mathewson, C., (1979, August), Effects of surgical positioning; *AORN Journal*, 30(2).

Gruendemann, B., (1987), Positioning Plus; Devon Industries, Chatsworth, CA

Martin, J., (1987), Positioning in Anaesthesia and Surgery; Saunders, Philadelphia, P.A.

Merrill, S., (1982, January), A teaching plan for positioning; *AORN Journal*, 35(1).

Miner, D., (1987, May), Home study program: patient positioning; *AORN Journal*, 45(5).

ORNAC Standards - Technical Standards.

AORN, (1990, November), Recommended practices: positioning the surgical patient; *AORN Journal*, 52(5).

Smith, K., (1990, December), Positioning principles. An anatomical review; *AORN Journal*, 52(6).

So You Want to Work in the O.R.?

By Karen M. Jordan

Introduction

Looking back over 13 years as a perioperative nurse, it never ceases to amaze me what patients, doctors and even other nurses think our function is as a member of the surgical team.

When I read the following article years ago, I laughed at its humorous accuracy of some of the daily occurrences. It's not always as dramatic as depicted on television, but I have come to appreciate and marvel at perioperative nursing for its vast knowledge base of various surgical specialties; the required anatomy, physiology, perioperative assessments, technical and organizational skills and its emphasis on humanizing a "sterile" environment while providing safety in all aspects of patient care.

When I teach student perioperative nurses, this article is presented to them and we all have a chuckle. I would like to share it with others in nursing and "share the chuckle" as well as sharing a small glimpse of our world.

Anna Kristoff,
Clinical Nurse Educator,
Regina, Saskatchewan, is president- elect of the Saskatchewan Operating Room Nurses Group.

You've decided you want to work in the operating room. I hate to do this, but there are a few things you should know before you begin. You've heard it's so rewarding - receiving the gratitude of patients and the admiration of doctors. And it's so educational - working with intelligent, dedicated doctors with years of training behind them.

It is true, the knowledge the surgeons exhibit is amazing. But let's face it - in the quest for a degree - some areas received little, if any, attention. One of the main areas of neglect is the ability to tell or estimate time. When surgeons are asked how much longer it will take to finish a procedure, a basic deficiency rolls in like a clap of thunder. In dealing with this, one formula that works quite well is to double the time estimate and add 37 minutes. This formula works well also when they call to estimate time of arrival to begin a case. Sometimes it works better to triple the time and add 49 minutes - it depends on the surgeon. You're probably already familiar with this weakness from having spent hours in a doctor's waiting room.

There's another problem. I'm sure many patients would jump off the operating table and run if they were aware of it. A surgeon comes into the room, scrubbed, ready to begin the operation. After drying hands on a cloth towel, some surgeons stand before the containers - one a cloth laundry bag and one a plastic hamper liner - and try to decide where the towel goes. We generally try to let them work it out for themselves, but the patient is anesthesized and we have to set a time limit.

After being gowned and gloved, we hand our surgeons another towel to wipe gloves. Now we're back to step one. Some surgeons attempt to cover their confusion by pretending they're Magic Johnson going for a long shot. They trot across the room, turn and let the towel fly. When it drops two feet from the containers, the decision is out of their hands.

We've been using disposable drapes that have a large white piece of paper over the fenestration with the words "Remove Prior To Use." One can only believe that some didn't. I've heard surgeons explain that it's there for legal reasons. It's best to just nod in agreement - with a mask on they can't see the smile on your face.

It's so dramatic working as a team member "saving lives and curing the ills of humanity"! Don't be fooled. Some days don't quite reach those heights. The first months in the OR are unbelievable until you realize that magnitude of the situation is not always the prime consideration. Take it with a grain of salt when you're told, "This is the worst fracture I've ever seen"; "I've never operated on a hotter appendix (or gallbladder)"; "That's the biggest ulcer I've ever seen - it's a wonder he's alive"; "I've only seen a deformity this bad once before"; "These adhesions are like concrete", *ad infinitum*. There will be days when you'll be involved with a small hernia, an atrophied uterus, a normal appendix, and a boring arthroscopy. And you'll love the boredom. It could be worse. It's difficult to be fascinated with any procedure that lasts more than six hours. And any operation that begins after midnight lacks a lot of the beauty and wonder that would have been present 12 hours before. But at least you're well trained and ready to face the challenge.

Trust me when I tell you that you're going to believe you're marginally retarded, or worse, long before assurance arrives. I know. Once I spent quite some time in an instrument room searching before I went back and announced that I couldn't find the plastic scissors - all I found were metal. A friend of mine was told by a surgeon to "point" a suture. Never having heard this expression, rather than put a hemostat on the suture, she asked him, "Which direction?"

Expressions indigenous to medicine can be a challenge. I can remember how appalled I was to hear tissue described as friable. Why not broilable or sauteable? During a particularly trying procedure, a surgeon who strikes terror in the hearts of the most seasoned OR personnel asked me for the "dulox" - he needed it Now! In my panic, all I could think of was to wonder why he needed a laxative. I had never heard that expression before.

Hand signals can be an efficient way to make wants and needs known. But not all signalers follow the standardized movements. Attempting to decipher the code keeps you on your toes, as does trying to understand a mumbler. Mumblers speak like normal human beings when you're in the lounge...but tie a mask over their face and they're unintelligible.

You must think I've become very cynical. I prefer to think of life in the OR as realistic. The surgeons and staff members are human beings, some more so than others! I've worked in the OR for ten plus years, so I've wiped some of the stars out of my eyes. But I still love to come to work.

The OR is fascinating, and the talent present is unbelievable. I watch a stapedectomy through the scope and then see the patient's response to having hearing restored. I admire a surgeon who can take crushed and fragmented bones and fashion them back together with an assortment of plates and screws. I watch feet, dusky from impaired blood supply turn pink and warm after a bypass. I'm amazed when an anesthesiologist manipulates fluids and drugs, and turns around the downward trend of a patient.

I see an orderly who, while transporting a patient, allays fears and relaxes the patient more than any preop medication. I'll never cease to be amazed at a circulating nurse who can be opening a package of something I need, just as I'm thinking of asking for it. This is done in the middle of helping the anesthesiologist, making calls for the surgeon, keeping records, sending off lab slips and specimens, and counting sponges .

There's a liaison nurse, explaining procedures to a patient and keeping an anxious family informed and comforted. And a head nurse or supervisor listening to a surgeon explaining why he must do an emergency at precisely 11 o'clock - bumping three other surgeons; manipulating the schedule to cover for two people who called in sick; trying to listen to a sales representative with a product to "answer all our problems"; talking to maintenance about the 15 degree difference in temperature in the rooms; and still having time to listen to each of us. There's a surgical tech who must learn the new products to be able to help - if not guide - the surgeon, answer questions, anticipate needs and neutralize tensions while standing for hours - feeling the varicose veins grow much like a run in a pair of pantyhose .

The people in the background do their jobs so efficiently and carefully that we take them for granted, not realizing much of the time that if they didn't do their jobs so effectively, we couldn't begin to do ours.

Yesterday I got angry and discouraged, and I felt like walking away and never coming back. Today I laughed and I enjoyed and I shared a feeling of satisfaction I don't think many people experience in their work. I can't think of any place I'd rather be working.

Karen M. Jordan is a certified surgical technologist on the OR staff at Woodland Park Hospital, Portland, Oregon. Her article is reprinted with the kind permission of Ethicon, Inc., 1992.

Conference Calendar

Quebec City - Quebec 13th National O.R. Nurses Conference.
June 6th - 11th, 1993

"Comprehensive approach to care: A beacon in a world of automation"
Contact: Forum Québec
30 Grande Allée Ouest
Québec, PQ G1R 2G6
Tel: (418) 524-8093
Attn: Steve Marchessault

The 5th Windsor & District O.R. Nurses Association Conference

"Challenged by Change"
The Cleary Auditorium,
April 23 & 24, 1993
Contact:Henrietta Thurston (519) 735-1928
Pat Busteed (519) 979-3973
Judy Doherty (519) 737-6740

World Conference of Operating Room Nurses - VIII
Sponsored by AORN
September 6-10, 1993
Adelaide, Australia

Canadians attending this conference and who wish to join in the celebration of Fellowship night and comply with the request to be dressed in a manner to signify your country - the Canadian Mountie shirt and hat can be purchased at the ORNAC booth during the National O.R. Conference in Quebec City, June, 1993, at a cost of $20.00.

Saskatchewan Operating Room Nurses' Group 8th Annual Conference
will be held on September 24-26, 1993
at the Ramada Renaissance Hotel,
1919 Saskatchewan Drive Regina, SK.

Operating Room Nurses of Alberta
15th Annual Conference
October 20 - 23, 1993.
Convention Centre,Calgary, Alberta.

1994

Operating Room Nurses of Ontario
3rd Provincial Conference
April 25 - 27, 1994
Ottawa Congress Centre,
Ottawa, Ontario.

B.C.O.R.N.G. 14th Biennial Conference
June 2 - 4, 1994, VERNON, B.C.
Contact: Trish Allen, 4108 - 14th St.,Vernon, B.C.
V1T 8B9 **Phone: (604) 542-2418**

1995/1997

ORNAC - 14th National Conference
Vancouver, May 8-12, 1995

ORNAC - 15th National Conference
Ontario, 1997.

O.R. Nurse Day

According to all reports from coast to coast the celebration of "O.R. Nurse Day" was a great success. Many hospitals held Open House to the public and colleagues. The day was publicized in the media-newspapers, TV, radio and videos were made in some agencies. All in all it was a day to show our pride in being operating room nurses. To have a celebration like that requires a great effort, personal time and commitment. I congratulate all for a job well done.

Gloria Stephens, President, ORNAC.

Letters to the Editor

Frequently the Journal receives letters from readers seeking information. We do not have the resources or staff to answer such requests, but we can offer them to the readership and invite you to FAX any reference material or information you have to your colleagues.

Dear Editor:

An unusual case of post-operative pneumonia in a previously healthy patient, recently surfaced at our hospital. Results of the sputum culture determined one of the causative organisms to be *Xanthomonas Maltophilia.*

Environmental cultures taken from the anesthetic machine equipment isolated heavy growth of *Xanthomonas Maltophilia*, as well as yeast and *Pseudomonas Aeruginosa* from the 'Breathing Hose to the Ventilator' on two anesthetic machines, and *Pseudomonas Aeruginosa* from one Scavenging Hose.

This corrugated tubing is not part of the patient breathing circuit, but is integrated with the anesthetic machine circuitry. Previously, there was no standard cleaning protocol in place for tubing not in contact with direct patient air exchange.

Literature search and consultation with area hospitals did not reveal a standard method or time frame for processing this type of anesthetic equipment. We would appreciate any information or suggestions you may have in regards to processing the corrugated tubing, not part of the patient breathing circuit.

J. O'Grady,Infection Control Coordinator, &
E. Winters, Nurse Manager, Operating Room,
The Riverside Hospital, Ottawa, Ontario.
FAX (613) 738-8522

Dear Editor:

I am an instructor in the St. Clare's Operating Room and I am writing to request some information regarding "confine and contain" during operative procedures in clean contaminated as well as contaminated cases. I would appreciate any information on recommended standards as well as any suggested reference material I may avail. We are presently revising our Policy and Procedure Manual and would appreciate any help you can give us on this information.

Glenda Tapp, R.N.
Operating Room Instructor
St. Clare's Mercy Hospital, St. John's, Nfld.
FAX (709) 738-0080

ORNAC
Recommended Standards

The Recommended Standards for Operating Rooms in Hospitals, as established by the Operating Room Nurses Association of Canada, are available for sale
Recommended Standards
@ $12 per copy
Recommended Technical Standards
@ $20 per copy
Cheques and money orders should be made payable to:
The Operating Room Nurses Association of Canada. Postage will be added.
Direct your orders with a return address to:
Shirley Hemerling, Operating Room
Kelowna General Hospital,
2268 Pandosy St.,
Kelowna, B.C. V1Y 1T2
Telephone Orders: (604) 861-5945
FAX Orders: (604) 862-4250

Dear Editor:

Presently, the operating room of the hospital in which I am employed, is addressing their policy on pre-operative skin preparation. All the literature I have read to date, including the A.O.R.N. Standards, and the Canadian Recommended Technical Standards for Operating Rooms, has indicated that post-operative infection is clearly affected by the method used for pre-operative hair removal, i.e., removal versus no removal ; clipper versus razor, versus depillatory cream. In addition, the relationship between post-operative infection and the amount of time elapsing between pre-operative hair removal and surgery has also been documented in many articles. I have been unable to locate any documentation or recommendations regarding the practice of hair removal in the actual surgical theatre.

I would appreciate any informtion on the current practice.

Valerie Anderson
Nurse Clinician
The Riverside Hospital
Ottawa, Ontario. FAX (613) 738-8522

Organizational Neurotics

By Dr. Dorothy del Bueno, R.N., Ed.D.

Health care organizations are in a survival mode. Due to fiscal cutbacks, political insensitivity and a public that's demanding greater accountability in all spheres of health care, management personnel are being coerced into initiating drastic changes. These changes or shifts in paradigms have the potential to make organizations listless, becalmed and depressed, says Dr. Dorothy del Bueno, one of the keynote speakers at the recent Health Conference '92, sponsored by the B.C. Health Association, and the Registered Nurses Association of B.C., held in Vancouver in mid-November.

Dr. del Bueno, a professor of nursing administration at the University of Pennsylvania, feels there are suitable remedies available to counteract this organizational malaise, many of which have application in the operating room, as well as other hospital departments.

One of the remedies she advocates for this organizational depression and listlessness she calls the DNR approach, "Do Not Retain."

Organizational addicts

Referring to types of employees that should be either dismissed outright (or not hired as new employees in the first place), she suggests that her DNR approach is just as relevant and humane for the new and old employees as it is for patients.

"I'm not talking about those employees who have always been expendable: the incompetent, the unsafe, the substance abusers, or those whose personalities are driving managers crazy. . . I'm talking about those more insidious types who are rebels, organizational addicts or neurotics."

What is one of the first things organizations do when they want a change or a shift in paradigms? "They recruit new blood," said del Bueno. "But too often the intended change in personnel get's eaten up and spit out by unproductive, incompetent and dysfunctional staff bent on sabotage." And those employees you wish to rely on, who could make a successful change , become embittered and disillusioned.

As del Bueno sees it, employees will have to "fit in" if the paradigm shift or change is to be a success.

"On one end of the continuum you have what I call 'the good soldier' who has high values and high commitment, who behaves the way we want him to. The trouble is, the good soldier is incapable of change."

"On the other end of the continuum is the 'rebel' or 'gad-fly.' This person has no commitment or values that would enhance the organization."

These two types of employees are extremes, del Bueno stressed. In reality, when a shift in paradigms is required (or a change in organizational construct), these two types of people cannot remain.

"These people are like a rock in the water. The water is the change desired. But the water can't get by the rock. The change is impeded." So, the good soldier must go, as well as the rebel - one because of the inability to change, the other because he/she is blatantly dysfunctional and a saboteur.

The adaptors and the mavericks

Two other employee types were described, the "adaptor" and the "maverick." The adaptor can change, is obedient and goes well with the new norms. This person will survive a change because he/she has commitment, but not a strong commitment. The maverick, on the other hand, is committed to the values but not necessarily their norms. This person is a pain in the neck and is constantly complaining and annoying. "When there is a change, the maverick is all for it, not because they can appreciate the change, but because it's what they've always wanted."

"The problem with the maverick, however, is that they are easily frustrated if change is not fast enough or if the change is not what is expected."

As managers, when a change or shift in the paradigm is to be instituted, their responsibility will be to know just where everyone is on the continuum, and will they fit in?

Here del Bueno suggests that current employees can make a self-analysis of where they fit on the continuum: "...and if you are the driver or orchestrator of the change, your role is to analyze where everyone is situated on the continuum."

Types of Neurotics

Dr. del Bueno's next description settled on the organizational addict or organizational neurotic.

The first she described as "the know nothings - do nothings." If one doesn't learn anything, one can't forget anything. Such people know how to listen, but they don't hear. "They talk about the good old days, the past. Instead of using history to understand, they become immobilized by it and can't get beyond what was and what used to be."

The "Co-dependent"

The next organizational neurotic is the co-dependent. Co-dependency is a term used quite a bit today. These people are the able, and they are competent, but they are not "enabled". They use the organization to meet personal needs, such as affiliation needs, status needs. These are the people that must be liked, del Bueno says.

"You have to like me... I cannot survive in this organization unless people like me." del Bueno stressed that these people should never be made managers. As co-dependants, they have no outside life or interests...you'll call up that person and give them the old Christian martyrs routine: 'Gee, we really need you tonight. . . ' and sure enough, that person will shows up on the night shift for the good of the patients."

The paradox is that these people are reliable, they are committed, and they will do almost anything you ask. "But they have no vision...", she says.

The co-dependent also lacks enthusiasm. Today, you've got to have a lot of energy and enthusiasm."

Co-dependents are often promoted from within; and this is a paradox, she said, because many nurses probably work in organizations that espouse the value of trying to promote from within to reward people for being loyal.

"But loyalty is not the same as either competence or ability to change, or risk taking. Loyalty is not a surrogate for these other things, so we have another paradox. We promote people because they've been loyal...but they may not be the people we need to implement the kind of changes that are necessary today. We can't live with these people; we can't live without them, so we have this paradox."

The "Technocrats"

The next kind of organizational neurotic is the technocrat or the provincial. These are the ones that can drive you up the wall. They define their work. They define what they do by technical procedures. "Nurses," del Bueno pointed out, "particularly know what I'm talking about. Technocrats are the quantitative people where everything is defined by numbers. How many hours you sit (in lectures, classes, courses). While sitting is sitting, it is not a surrogate for anything. It is not competency. It is by number: how many hours, how many classes, how many procedures, how many papers."

These technocrats are also individuals that make a fetish out of procedures. "Now a procedure should be done correctly and accurately. But it is still a procedure, and a procedure is a procedure. . . and not the be all and end all of patient care."

The technocrats are also the people who have the "twenty-page skill list." As a consultant, del Bueno explained that part of her business was competency assessment.

"When I go into a hospital, they say: 'Oh yes, we have competency evaluation.' And I say: 'Oh, terrific, what do you have?' Guess what they do, they show me this forty-page list. A list is a list. It's a topic. It is not competency."

For the technocrat, there is only one way to do something - my way. If it's not done my way, it's got to be wrong. The only rationale for the technocrat is policy. The policy says so. So, everything is bound by them and the policy."

The "Absolutists"

Next come the organizational neurotics referred to as the "absolutists." The absolutists are skezmogenic thinkers. Skezmogenic thinkers are people who polarize good, bad, black, white. For them, there are only two ends of a con-tinuum. Instead of seeing everything in the real world as in shades of grey, they only see things in black and white, in absolutes. These people are very concrete.

As absolutists, these people cannot take risks. They prefer to operate and behave by rituals and routines. "Now, again, rituals and routines can be helpful. Under certain circumstances, they can be comforting - but not if it's the only way one operates."

Absolutes do not want to think. They want to be able to say, "We have to do it this way," "the book says to do it this way". or, "It's not my fault, because the policy said...the protocol said...the book said..."

"People who are into content, into what the law says versus what the law is intended to achieve, are the absolutes. They are compliance people in a world that does not call for compliance, but for growth, movement and judgement. The world does not need people that just comply."

Another organizational neurotic was described - the Rodney Dangerfield, the "we don't get no respect" people. These are people whose self-esteem and self-worth are predicated on recognition from powerful others.

"These people have really never grown up because they only perceive their value from how other people perceive it. When they were children, it was their parents'. Now in the work world, and not having cut that cord, it's the boss or doctors or the crediting

agencies, or the faculty."

"But these people, once again like the co-dependents, never get enough no matter how much is given to them. These are the people who look in the mirror rather than out the window. They only see the world as a reflection of themselves, and so they are very egocentric. The world revolves around them."

The "appliance" nurse

The next person described as an organizational neurotic was said to be the equivalent of the organizational couch potato. In some nursing circles, this person is referred to as the "appliance nurse. This is the nurse or health care worker who works to buy a new washing machine, or put a roof on the house.

"Now, I don't mean to patronize or denigrate people who work for those reasons. It doesn't mean they can't be competent, nor does it mean they can't make a contribution. But on the other hand, their commitment is somewhat limited. They do the job, they are loyal - and they keep earning more by seniority and by staying alive."

Move on, out and up!

What do we do about these organizational neurotics or addicts? In answering the question, del Bueno said there were three choices in her view of the world: "moving on, moving out, and moving up."

"There comes a time when one has to make a change, and this is relevant even to ordinary everyday things like meetings. Mrs. del Bueno recommends that if one is blocked against getting anywhere at near a solution to any given problem, **move on.** There is a time to move on.

The next maneuver - **moving out** - involves getting people to leave the position. Maybe other people can do the job. New people can bring in new ideas. Moving people out and others in will shake things up.

At this juncture, the role of a consultant was described as one who "blows in, blows off and blows out." The speaker admitted that an advantage of being a consultant is that he/she doesn't have to live there. "The negative thing about being a consultant is that you can't make things happen. Only the people that are there can make things happen. People need to be helped to see the world from a different perspective, to become more sophisticated. There are lots of ways to see and view things. These views may not be all right, they may not all be good or all valuable, they may not even work at all, but at least a **moving up,** figuratively and literally, will provide people with the chance to think about things in a different way."

Weeding the garden

There are many metaphors that one can use for an organization or for a discussion of employee retention. The one Dr. del Bueno said she likes to use is the garden - the organization as a garden.

"One can ask about the organization just as one asks about the garden. Is it overgrown with weeds? Now weeds may look healthy, they may even be attractive. But weeds choke out functional plants and flowers. Weeds do not serve any real purpose. They consume enormous quantities of vital resources. With organizations, it's dysfunctional neurotic people who also consume enormous amounts of energy, time and effort. Like weeds, they serve no real purpose ultimately."

"Weeds are difficult to remove, just as these organizational neurotics are. In order to remove weeds, one has to dig very, very deep as the roots are strong. If you use a lawn mower, all you do is lop off the top. You are merely using an intervention or strategy which is generalized and equitable."

"Like the organizational neurotics, weeds serve one purpose - they keep the gardener busy. They also keep people like educators busy because we often conclude, erroneously, that the problems are educative: give them a class, a course, a seminar, send them back to school and they will be O.K. Wrong."

"Sometimes in an organization, dramatic and drastic interventions must be taken. We may even have to let the garden lay fallow. We may even have to remove certain units or services temporarily - only to get rid of the weeds temporarily. This will allow some new regeneration."

"The cost of turnover has been sighted many times. People go on and on about how expensive turnover is. Yet, the cost of advertising, of recruiting people, and training them can be as much as ten to twenty thousand dollars per person. This is a considerable cost which I do not mean to denigrate or make it sound less important."

"However, the cost of retaining the kind of people I have just described (the organizational neurotics) are enormous. They may be competent, they may be loyal, but they impede progress and change. They discourage other people who are enthusiastic and who are interested in doing things differently. Again, the costs here are enormous. They are lost opportunity costs, and these costs in the long term are far greater than the cost of retention." ■

Author

Dr. Dorothy del Bueno, R.N., Ed.,D., is a professor of nursing administration in the School of Nursing at the University of Pennsylvania. She is a well known educator, consultant, speaker and author. She is the author of *Power and Politics in Nursing Administration: A Case Book.*

Early Nasogastric Tube Removal After Abdominal Aortic Surgery

By D. Cameron, M. Lovell, W.G. Jamieson and K. A. Harris

Introduction

Controversy exists concerning the length of time that nasogastric tube drainage is necessary after abdominal aortic surgery. The purpose of the tube is to reduce gastrointestinal distention, prevent gastric dilatation and potential respiratory complications. Classic surgical teaching suggests that the tube not be removed until bowel sounds are present and or the patients have passed flatus. This classic teaching is now challenged. This study was conducted to determine the need for routine prolonged nasogastric decompression following aortic surgery.

Material and Methods

A 14- month case control study of 52 patients, who underwent elective repair of abdominal aortic aneurysms (AAA) or aortic bypass procedures by members of the Division of Vascular Surgery were used in this study. The study group consisted of 26 patients, and this group had their nasogastric tube removed at the same time the endotracheal tube was removed, usually 12 to 14 hours post operatively. The control group consisted of 26 patients, who underwent the traditional protocol of three to four days post operative nasogastric decompression. The study group was compared with the control group for abdominal distention, prolonged nausea/vomiting and the number of patients requiring reinsertion of the nasogastric tube was documented. The mean age of the AAA patients in the study group was 70±8 years, ranging from 55 to 84 years of age. The mean age of the aortic bypass patients was 61±9 years, ranging from 46 to 75 years of age. The mean age of the AAA patients in the control group was 70±7 years, ranging from 57 to 80 years of age. The mean age of the aortic bypass was 59±8 years, ranging from 43 to 70 years. The data was entered on a computer data base and results were compared using the unpaired student t test.

Results

The study group, totalling 26 patients, demonstrated that nasogastric tube removal with the endotracheal tube did not compromise bowel function as only one patient required reinsertion (3.8%),due to vomiting and abdominal distention. No other gastrointestinal or respiratory complications were noted. The control group, underwent the traditional protocol of 3 to 4 days of postoperative nasogastric decompression; none of this group developed gastrointestinal or respiratory complications following tube removal. The mean hospital stay was reduced from 15.2±5.2 in the control group to 12.1±2.5 days in the study group with a mean reduction of 3.1 days. (Fig 1) Patient comfort is also enhanced without a nasogastric tube.

Discussion

Nasogastric decompression has been the standard protocol following abdominal surgery for many years. Since its use by Levine[1] and Wagensteen,[2] it has been accepted that routine decompression of the gastroin-

Authors

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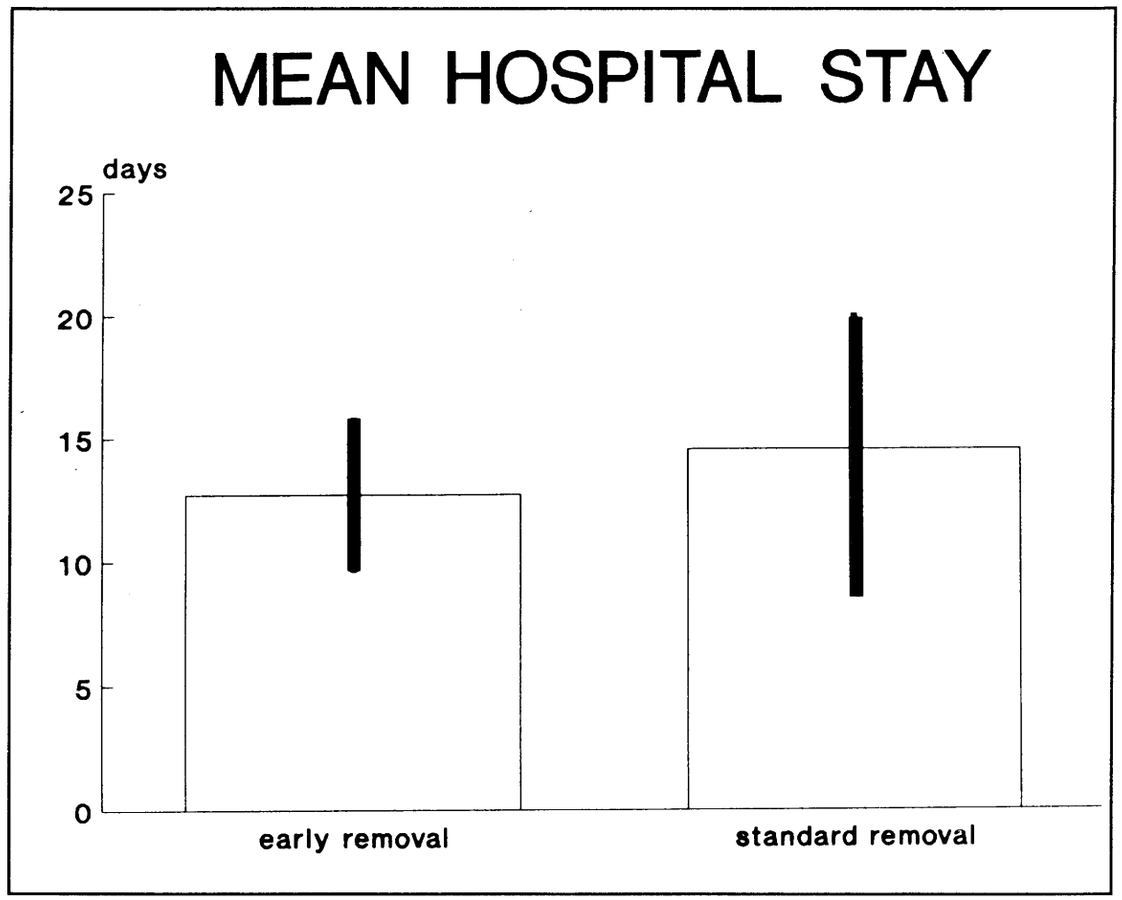

Figure 1

testinal tract will decrease the complications of paralytic ileus secondary to abdominal operations.

A very common complaint of patients with nasogastric intubation is discomfort from the tube causing sore throats, nasal irritation, difficulty coughing and expectorating mucous. As Livingston states in his paper patient discomfort is worsened by nasogastric tubes.[3]

Patients tend to inhibit coughing and expectorating mucous as the nasogastric tube deters the patients ability to deep breathe and cough effectively, therefore increasing the probability of the patient developing atelectasis or pneumonia. This increases recovery time and hospitalization cost. It is accepted that most major aortic surgical procedures require lengthy anaesthesia, and the patient experiences decreased total lung capacity and tidal volume. As well, the anaesthetic agent inhibits bowel motility.[3]

In a prospective study by Savassi- Rocha et al,[4] they concluded that gastric decompression did not show any benefit in duration and intensity of paralytic ileus and has not decreased the incidence of complications of colorectal operations. They concluded in their study that tube decompression of the stomach had no effect on the duration or degree of ileus and had no advantages to outweigh patient discomfort. They recommended the ommission of routine post operative use of nasogastric decompression and the nasogastric tube should be restricted to instances of acute post operative gastric dilatation and or vomiting caused by impaired emptying of the contents of the stomach tract.

The nasogastric tube seems to contribute to a patients general feeling of unwellness. It could be argued that the greater number of invasive tubes a patient experiences during the post operative period, the greater the psychological effect on the recovery attitude and goal towards a state of wellness. Hospitalization time is decreased, and this becomes an important advantage with rising hospital costs and days of constraint.

TABLE 1:

Aortic Procedures, Study Group

	OVERALL		REINSERTION	
	NUMBER	PERCENT	NUMBER	PERCENT
AAA	17	65%	0	0%
Aortic	9	35%	1	11%
TOTAL	26		1	3.8%

TABLE 11:
Control Group

	OVERALL
Number	
AAA	17
Aortic	9
TOTAL	26

Conclusion

We recommend that patients undergoing aortic surgery can safely have the nasogastric tube removed in the early post operative phase, at the same time the endotracheal tube is removed. Hospitalization time is shortened by a mean of 3.1 days, and patient comfort increased by early removal of nasogastric tubes. In our study 96% of patients did not require reinsertion of the nasogastric tube.

Bibliography

(1) Levine A., A gastroduodenal catheter. *JAMA*, 1921; 76: 1007-9

(2) Wagensteen O.H., Paine J.R., Treatment of acute intestinal obstruction by suction with the doudenal tube. *JAMA*, 1933; 101: 1532-9

(3) Livingston E.H., Passara E.P., *Post Operative lleus Digestive Disease and Sciences*; 1990, 35: 121-132.

(4) Savassi - Rocha P.R. et al: Evaluation of the routine use of nasogastric tube in the digestive operation by a prospective controlled study; *Gyneacology and Obstetrics*, 1992; 174: 317-319.

(5) Nathan B.N., Pain J.A., Nasogastric suction after elective abdominal surgery: a randomized study; *Annals Royal Coll Surg Eng.*, 1991; 73: 291-294.

A Decade of Dedication

Fasten your seatbelt for a rocky and exciting ride in 1993! It will be a year of turmoil and celebration. The Journal will be celebrating its 10th Anniversary as Canada's health care system enters the new age of transition and turmoil. Tim Porter-O'Grady predicts it will be the "best of times and the worst of times..." as health care moves into "transitional times" - the bridge from the "old paradigm of the industrial age" to the new"socio-technical" informational age.

In that we are in the publishing business, the information business,we are right in fashion and happy to be around to serve our readers in this exiciting, yet uncertain era. We'll do our best to keep you informed, along with the help of ORNAC, the Review Board, the "new advertisers", and all our many friends in operating rooms across Canada.

Mr. Porter-O'Grady, a Canadian health expert, was speaking to the November '92 Nursing Administration Conference in Ottawa, where he said health care personnel are victims of this transitional age and individually need to understand the chaos and move through it. Changes we start today may never be completed as further change will interrupt and thrust us in another direction. He challenged nursing leaders to examine their behaviours and ability to adapt in preparation for the demands of the new order, the changing paradigm. Unlearning old behaviours will be the greatest challenge, he said.

Dr. Dorothy del Bueno tells us health care organizations are in a "survival mode" and that these changes or shifts in paradigms have the potential to make organizations listless and depressed. Her remarks are reported on page 22. Well worth the reading.

At the same conference the author of the Canadian best-selling book - "Who Cares - The Crises in Canadian Nursing", Sarah Jane Growe, says nurses must become more assertive and politically active. The "transitional" age or this period of chaos is the ideal time to make your moves.

Ms. Growe's excellent presentation will be published in the first Journal of 1993 - our 10th anniversary issue. Don't miss her political thesis.

There are so many learned views to report on , so many conferences to attend, so many clinical experts willing to share their knowledge with our readers. Three fine examples of perioperative nursing expertise are featured in this issue: Patient Positioning, Unknown Allergy and Early Nasogastric Tube Removal. Many more fine articles, conference reports and photographs are left for 1993 issues because we simply can't afford to publish a larger Journal until we have more advertisers and more subscribers.

The Journal has survived for 10 years. In the early years, advertising revenue kept the publication financially viable, however, recently it's the subscriptions from our dedicated OR nurses that keep the magazine afloat. For this support we thank our Paid Subscribers and our few but loyal advertisers. We hope to work in liaison with ORNAC and its members and publish the Journal for another decade ! We especially want to be around to report on this new "transitional age" and we predict the "New Nursing Age". We want to be along for the exciting ride !

Best Wishes to all in '93. Join us in a year of celebrations and Special Issues of the Journal.

Ron and Agnes Forster

Québec

13e Conference Nationale des Infirmieres et Infirmiers de Salles d'Operation, du 6 au 11 juin, 1993

"Vision Globale Des Soins: Phare au milieu De L'Automatisme"

Dimanche, 6 Juin

Visite de Centres Hospitaliers et brunch a I'lle d'Orleans; Ateliers scientifiques; Inscription - Foyer du Centre des Congres
Soiree: Elixirs et Frivolites.

Lundi, 7 Juin

Inscription- Ceremonie d'ouverture
1- Silence...maintenant on se parle: **Agathe Riverin**
2- Lithotriptie par ondes de choc extra-corporelles: **Dr. Bruno Laroche**
3- Du ronflement au syndrome des apnees du sommeil: **Dr. Frederic Series**

Ouverture des kiosques

1- Ethique: Le savoir-faire avec art et dexterite: **David Roy**
2- Silence.. maintenant on se parle: **Agathe Riverin**
3- Responsabilite et imputabilite de maintenir sa competence: **Gloria Stephens**

Soiree Johnson & Johnson - Salle de bal Quebec Hilton.

Mardi, 8 Juin

Inscription
1- La chirurgie etincelante: **Denis Chabot**
2- Diagnostic des soins inflrmiers; j'ai pas le temps!: **Lina Rahal, Danielle Schmouth-Valois**
3-Glisser, rouler sans forcer: **Raynald Larouche**
1- Le laser et la securite: **Nicole Fortin**
2- Tu dors, je veille: **Yves Arcand**
3- Les points de pression: J'y vois: **Lise Boilard**
1- Action neurone vers l'an 2000,
2- Demystifier l'antre operatoire,
3- Au travail que faites-vous avec vos emotions et vos sentiments profonds: **Yvon Bureau**

Soiree:La Magie Du Romantisme a Travers Les Epoques - Salle de bal, Chateau Frontenac.

Mercredi, 9 Juin

Inscription
1- Nouveau paradigme: Les precautions universelles: **Louise Monette**
2- Au nom de la loi: **Fay Rozovsky**
3- La selection des dechets - pas seulement pour les villes
1- Assistance operatoire: Un nouveau role attrayant pour l'infirmiere en perioperatoire: **Jane C. Rothrock**
2- L'informatisation des dossiers au bloc operatoire: **Kathryn Hannah**
3- Centre de jour: **Raymonde Auclair**

Apres-midi (libre) Mieux-etre et qualite de vie.
Soiree Amsco - Casino et danse sur le fleuve St-Laurent.

Jeudi, 10 Juin

Inscription
1- L'endoscopie abdominale: **Eric Poulin, Denise Hamel**
2- L'approche alternative, est-ce possible en pre et per-op ?: **Sylvie Auger**
3- La reutilisation de l'uniservice-Qui en prend la responsabilite ?
1- Au nom de la loi: **Fay Rozovsky**
2- Controle statistique de la qualite des soins, un modele operationnel applique au bloc operatoire: **Rita Martel, Francoise Latouche**
3-Robotiser ou humaniser l'accueil: **Marie-Therese Caron**
1- L'infirmiere a-t-elle toujours sa place en anesthesie?: **Yan White, Gloria Stephens, Jack Kriss**
2- L'infrmiere riche ou pauvre: **Marcel Roberge**
3- Abus verbal: **Jean-Claude Blondeau**

"Soiree Champetre"

Vendredi, 11 Juin

Conference de fermeture "Au-dela de la technique, il y a l'equipe". Ceremonie de cloture. Brunch de l'au revoir. Un service de traduction simultanee sera offert pour toutes les conferences.
L'inscription au congres et la reservation d'hotel doivents'effectuer par l'intermediaire de:

Forum Quebec
30 Grande Allee Ouest
Quebec,PQ, GIR 2G6
Tel.: (418) 524-8093
Att.: Steve Marchessault

Annulation:Les demandes d'annulation d'inscription seront recues jusqu'au 22 mai 1993. Un cout administratif de $20.00 sera retenu.

Québec

13th National Operating Room Nurses Conference Quebec City, June 6th to 11th, 1993

"Comprehensive Approach to Care: A Beacon in a World of Automation "

Sunday, June 6

Hospial visits; Brunch at Ile d'Orleans; Workshops; Registration at the Convention Center.
Evening: Elixirs and Frivolities

Monday, June 7

Registration - Opening ceremony
1- Silence... Let's talk,
Speaker: **Agathe Riverin**
2- Lithotripty by extra-body shock waves: **Dr. Bruno Laroche**
3- From snoring to sleep apnea syndrome: **Dr. Frederic Series**

Opening of exhibits

Afternoon Sessions:
1- Ethics: Savoir-faire with art and dexterity: Speaker: **David Roy**
2- Silence.. Let's talk. Speaker: **Agathe Riverin**
3- Competency and life long learning. Speaker: **Gloria Stephens**

Ethicon Evening presented by Johnson & Johnson, Medical Products.

Tuesday, June 8

Morning Registration
1- Glittering surgery: Speaker: **Denis Chobot**
2- Diagnostic nursing; no time: **Lina Rahal, D. Schmouth Volois**
3- Slide and roll without lifting: **Raynald Larouche**
1- Laser and security: **Nicole Fortin**
2- You sleep, I watch: **Ives Arcand**
3- Pressure points: I see to it: Speaker: **Lise Boilard**
1- Neuron action towards the year 2000
2- Enlightening the world of surgery
3- At work, how do you manage your feelings: **Yvon Bureau**

Evening
The Magic romance Throughout the Centuries - Ballroom, Chateau Frontenac.

Wednesday, June 9

Registration
1- New paradigm: Universal precautions, **Louse Monette**
2- Legal aspects, **Fay Rozovsky**
3- Garbage selection - not only for cities.
1- First assistant: An exciting new role of the perioperative nurse: **Jane C. Rothrock**
2- Computerization of records in O.R.: **Kathryn Hannah**
3- Day Centre: **Raymonde Auclair**

Free afternoon

Amsco Evening - Casino and dance on the St. Lawrence River.

Thursday, June 10

Registration
1- Abdominal endoscopy: **Eric Poulin, Denise Hamel**
2- Alternative approach: Is it possible in pre and post-op? Speaker: **Sylvie Auger**
3- Reusing disposables: Whose responsibility is it ?
1- Legal aspects: **Fay Rozovsky**
2- Statistical quality control an operational model applied in the O.R.: **Rita Martel, Francoise Latouche**
3- Robotizing or humanizing the reception: **Marie-Therese Caron**
1- Is the nurse still needed in anaesthesia? **Yan White, Gloria Stephens, Jack Kriss**
2- Rich or poor nurse: **Marcel Roberge**
3- Verbal abuse: **Jean-Claude Blondeau**

"Country Evening"

Friday, June 11

Closing conference "Beyond technology, the team'',
Closing ceremony /Farewell brunch
Three (3) sessions will be held simultaneously. All conferences are translated.

Registration to the Conference and hotel reservations must be made through:

Forum Quebec
30 Grande Allee Ouest
Quebec, PQ, G1R 2G6
Tel.: (418) 524-8093
Att.: Steve Marchessault

Registration cancellation requests will be accepted up to May 22, 1993. A $20.00 administrative fee will be charged.

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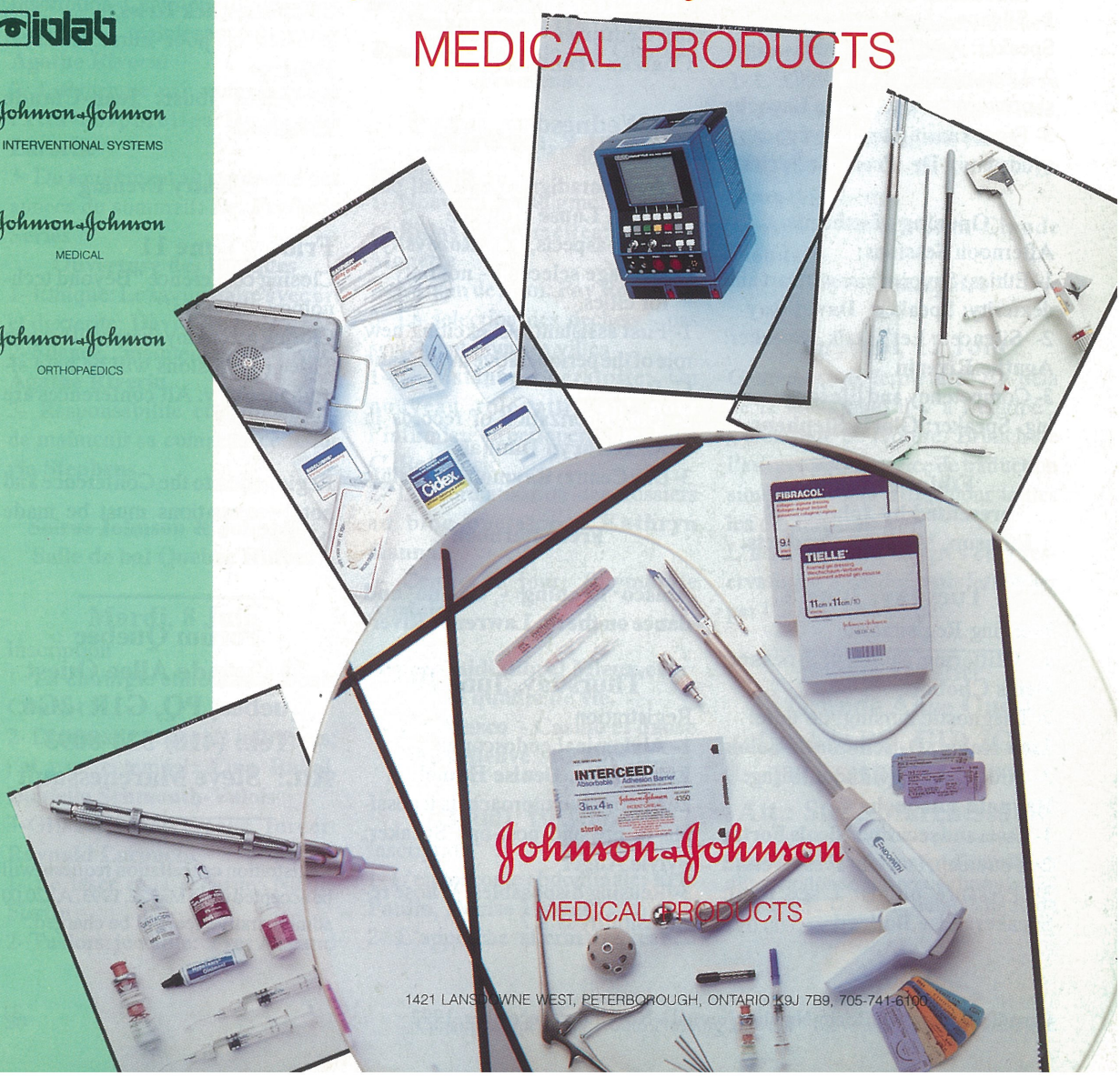

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