CANADIAN
OPERATING ROOM
NURSING JOURNAL

Volume 24, Issue2
June 2006

Ozone Sterilization

Teenage Surgical Consent

ORNAC National Call for Abstracts

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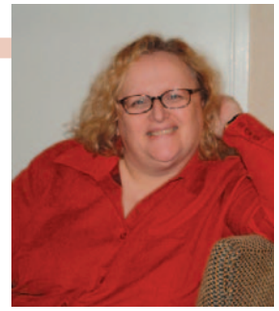
President's Message



It is hard to believe that summer is a mere breath away! After a busy spring, the summer season seems to be a time where we slow things down a little. In ORNAC's world, however, we are as busy as ever.

Recently I had the good fortune to attend the *Association of periOperative Registered Nurses* (AORN) congress in Washington, DC. If you have never attended an AORN congress I would recommend it. The congress' are well organized and offer a great chance to get out and see something new. The learning opportunities are also vast because healthcare is so different in the USA.

Of special interest to me was an event called *Lobby Day*. On that day a group went to Capital Hill to talk to congressional health staffers about AORN's *Patient Safety Mission* and *National Time Out Day* (taking place on June 21, 2006). They matched up member constituents with congressional staffers so that the AORN members were able to speak to individuals who were familiar with the AORNA member's local area.

AORN also offered a pre-congress education session called *Effective Public Policy Advocacy*. During this session, attendees learned about how the government functions, the processes and how to effectively lobby for change. What a great opportunity! How can we adapt this idea to our own needs? Talk it up amongst your colleagues and see where you can take an idea like this. Why not invite a provincial or federal politician to walk with you through your operating room? Or ask your local government representative to lobby with you? Would Canadian Nurses Association (CNA) be able to facilitate an adventure similar to AORN *Lobby Day*? Should we be requesting it?

Several discussions regarding the shortage of nurses have crossed my desk in the recent months. We are being asked more frequently to preceptor students and I am always questioning why there are not more incentives provided to those nurses who do give of their time and energy in this process. Even our own nursing association (CNA) will only provide continuous learning activity credit up to a maximum of 40 hours over a 5 year period. Is this limit reasonable and does it suit the needs of our profession?

Each time you choose to preceptor or mentor a student you have the opportunity to also learn more about your own specialty. But, if we are looking to encourage RNs to join, and remain in, the perioperative environment, and at the same time are asking them to take on more and more students in order to help fill our future ranks, there should be additional benefit to the preceptor. Pay increases or extra vacation days are some ways that could be used to recognize the preceptor's contribution.

Some provinces do provide incentive bonuses for staff members who act as preceptors. How does your province rate? Can it do better?

If you think, yes it can, and then it is time to start talking to your provincial government, as well as the CNA, to encourage them to acknowledge the ongoing commitment made by nurses in this country!

Take action, all it takes is one voice at a time. Shout it out and let it be heard by others. We all learn from each other so everyone gains when we work together.

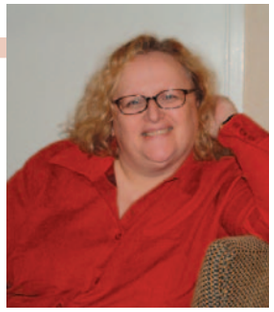
Just some food for thought as you enjoy yourself this summer. Have a great summer season.

Source:
Guidelines for Earning Continuous Learning (CL). Canadian Nursing Association Certification Program. Accessed at: http://www.cna-aiic.ca/cna/documents/pdf/publications/Continuous_learning_recert_2006_e.pdf

Marcy McKay, *RN CPN(C), is President of the Operating Room Nurses Association of Canada. She is a staff nurse at Victoria, General Hospital, Victoria BC, and is currently the webmaster for* ***www.ornac.ca****.*

Marcy McKay, *infirmière autorisée, CPN(C), est la présidente de l'Association des infirmières et infirmiers de salle d'opération du Canada. Elle est infirmière de soins généraux au Victoria General Hospital, Victoria, C.-B., et est actuellement webmestre du site* ***www.ornac.ca****.*

Message de la présidente



Il est difficile à croire que l'été arrive à si grand pas! Après un printemps très mouvementé, on serait peut-être porté à croire que l'été s'avérera un peu plus calme. Mais non, à l'AIISOC, nous serons aussi occupés que jamais!

Récemment, j'ai eu l'heureuse occasion d'assister au congrès de l'*Association of periOperative Registered Nurses* (AORN) à Washington (DC). Si vous n'avez jamais assisté à un de leurs congrès, je vous le conseille. Ils sont très bien organisés et vous offrent une excellente occasion d'observer de nouvelles perspectives. Et il y a vraiment beaucoup à apprendre, les soins de santé étant très différents aux Etats-Unis.

J'étais particulièrement intéressée par un événement appelé *Lobby Day* (le jour de lobbying). Ce jour-là, un groupe s'est présenté au Congrès américain afin de parler aux représentants de celui-ci chargés de l'adminstration des soins médicaux. À l'agenda étaient le *Patient Safety Mission et le National Time Out Day* (21 juin 2006) de l'AORN. Parce que chaque membre de l'AORN a pu rencontrer un membre du Congrès représentant sa région, il était possible de se concentrer sur les questions régionales les plus pertinentes.

Avant le congrès, l'AORN a aussi offert une séance de formation nommée *Effective Public Policy Advocacy* (plaidoyer efficace de politiques publiques). Lors de cette séance, les participants ont appris comment procéder, comment fonctionne le gouvernement et comment effectuer des changements en élaborant un plaidoyer efficace. Quelle merveilleuse occasion! Comment pouvons-nous adapter cette idée à nos propres besoins? Parlez-en à vos collègues pour découvrir où vous mènera cette approche. Pourquoi pas inviter un politicien provincial ou fédéral à visiter votre salle d'opération? Ou pourquoi pas demander à votre représentant local de participer à la communication de votre cause? L'Association des infirmières et infirmiers du Canada pourrait-elle faciliter un événement semblable au *Lobby Day* de l'AORN? Devons-nous en soumettre une demande?

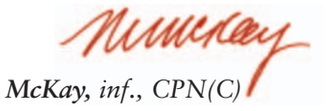
Depuis plusieurs mois, la question du manque d'infirmières s'est présentée à bien des reprises. Nous sommes de plus en plus souvent demandé de fournir de la formation. Je me demande souvent pourquoi il n'existe pas plus de programmes d'incitation pour les infirmières et infirmiers qui donnent de leur temps et de leur énergie en formant des professionnels de soins périopératoires potentiels. Même notre propre association, l'AIIC, ne reconnaît qu'un maximum de 40 heures de formation sur 5 ans. Cette limite est-elle raisonnable? Est-ce qu'elle répond aux besoins de notre profession?

Chaque fois que vous acceptez de jouer le rôle de formateur ou de mentor auprès d'un étudiant, vous avez l'occasion d'apprendre davantage sur votre propre champ d'expertise. Toutefois, si nous essayons d'encourager de nouveaux professionnels à se joindre au domaine périopératoire tout en leur demandant de prendre sous leur charge un nombre croissant d'étudiants, ils méritent être reconnus. Des augmentations de salaire ou des jours supplémentaires de congé, par exemple, pourraient récompenser les contributions des formateurs. Certaines provinces offrent un programme d'incitation pour ceux et celles qui assument les responsabilités du rôle de formateur. Quelle est la politique dans votre province? Pourrait-elle faire mieux?

Si la réponse est oui, des améliorations sont possibles, c'est le temps d'ouvrir un dialogue avec votre gouvernement provincial, sans oublier l'AIIC, afin d'encourager la reconnaissance de la contribution continue des infirmières et infirmiers à travers le pays!

Pour effectuer le changement, il faut commencer par une seule voix. Parlez tout haut pour que tout le monde vous entende. De la même manière que nous apprenons les uns des autres, tout le monde profite quand nous travaillons ensemble.

Et voilà quelques idées à mijoter pendant les mois du beau temps. Amusez-vous bien cet été.



***Marcy McKay,** inf., CPN(C)*

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LES JEUNES ADOLESCENTS SIGNANT LEURS PROPRES FORMULAIRES DE CONSENTEMENT POUR UNE INTERVENTION CHIRURGICALE :

Un dilemme éthique-légale pour les infirmières et infirmiers périopératoires autorisés

Auteur: *Kelly M. Kuz, infirmière autorisée, baccalauréat en sciences infirmières, CPN(C), certificat de niveau supérieur en soins périopératoires. Mme. Kuz est formatrice en soins périopératoires à temps plein au Grande Prairie Regional College et membre du personnel infirmier dans une salle d'opération locale. Elle participe au développement et à l'enseignement du programme de certification en soins périopératoires pour infirmières et infirmiers autorisés.*

RÉSUMÉ

Les problèmes de nature éthique-légale, définis dans le présent document comme des situations qui peuvent engendrer des répercussions légales, qui présentent des raisons morales convaincantes pour et contre une action particulière et qui exigent la prise de décision[1], ne sont pas rares dans le domaine des soins de la santé. Lorsqu'un jeune adolescent (défini comme une personne à charge ou de moins de 18 ans) consent à une intervention chirurgicale, des répercussions légales peuvent s'ensuivre. Le cas d'une fugueuse de 14 ans qui a signé son propre formulaire de consentement pour une cholécystectomie est examiné. Le concept du consentement est discuté et lié à une étude de cas concrète. Les éléments d'un consentement valide et informé sont identifiés, examinés et liés à l'étude de cas. En appliquant le modèle MORAL pour la prise de décision éthique[2], les enjeux éthiques du cas sont étudiés. Les répercussions légales possibles sont traitées et une stratégie de gestion des risques (protocoles de politique et de documentation relatifs à la procédure de consentement) est suggérée et évaluée.

1. Canadian Nurses Association 2002, Code of Ethics for Registered Nurses, Canadian Nurses Association, Ottawa.

2. Guido, G.W. 2003, 'Legal and ethical issues', in P.S. Yoder-Wise (ed), Leading and managing in nursing, Mosby, St. Louis, pp. 49-73.

YOUNG TEENAGERS PROVIDING THEIR OWN SURGICAL CONSENTS:

An Ethical-Legal Dilemma For Perioperative Registered Nurses

Author: *Kelly M. Kuz RN, BScN, CPN(C), Graduate Certificate Perioperative Nursing. Ms. Kuz is a full time perioperative nurse educator at the Grande Prairie Regional College and a casual staff nurse at a local surgical suite. She is currently involved in the development and teaching of the new ORNAC approved post RN Perioperative Nursing Certificate Program.*

ABSTRACT

During the delivery of health care, ethical-legal problems are not uncommon and can be defined as situations that have potential legal consequences when equally compelling ethical reasons for and against a particular course of action are recognized and a decision must be made.[1] Ethical-legal repercussions may occur when obtaining surgical consent from a younger teenager (defined as dependant and/or under 18 years of age). An ethical-legal dilemma arising from the case of a 14-year-old, run away girl, who had signed her own surgical consent for a cholecystectomy is analyzed. The concept of *consent* is discussed and related to an actual case study. The elements of a valid informed consent are identified, discussed and related to the case study. Using the *MORAL model for ethical decision-making*[2] the ethical implications of this case are analysed. Possible legal repercussions are addressed and a risk management strategy (suggested policy and documentation protocols for the consent process) is proposed and evaluated.

CASE STUDY

Sara (pseudonym) is an experienced perioperative nurse working in Alberta, Canada. On the day of this case she was circulating for a general surgery room working with a general surgeon (Dr. B). Between cases Dr. B was called to the emergency department to assess a patient who had presented there. When he returned, 20 minutes later, to the theater he informed the staff that he needed to do an emergency laparoscopic cholecystectomy at the end of the scheduled surgical list. The nurses were told to prepare the room for an adult female patient.

Sara and the scrub nurse, Polly (pseudonym), prepared the room. Once Polly was scrubbed and counted into the case Sara went to the holding area to assess the patient and to bring her in for surgery. Sara found the patient, a 14 year-old girl, Dianne (pseudonym), lying on the stretcher. Families commonly accompany patients to the holding area but this girl was alone. Sara went through Dianne's chart and found the appropriate documentation including a hand-written history, vital signs that were within normal parameters, blood work and an ultrasound report that was positive for cholelithiasis. There was also a consent form for a "*laparoscopic cholecystectomy possible open*" that was signed by the 14-year-old patient and witnessed by Dr. B.

During the assessment interview Dianne was not making eye contact with Sara and her answers were concise and delivered in a monotone voice. She displayed no overt signs of distress and denied experiencing any pain or physical discomfort. She told Sara that she was having her gallbladder removed and accurately described the laparoscopic method and the reasons that might require conversion to the open method. She named the surgeon who was going to do the procedure and she said the problems would get worse if she did not have the procedure. She revealed that she had run away from home the previous week. Up until then she had been living with her mother in a city more than 1500 kilometers away in another province. She was apparently now staying with an 18-year-old sister. Sara wondered why Dianne had run away and suspected that a children's social worker should become involved.

Policy at the hospital in question dictated that surgical consents for minors required the signature of a parent or guardian or, in the case of emergency, by two physicians. Sara notified the OR manager and while they were discreetly discussing the consent issue Dr. B came to the holding area and asked loudly "What is the holdup? Bring in the patient." Sara told the surgeon about the consent policy and the issue at hand. He replied that he believed the patient could sign her own consent form because she clearly comprehended the procedure and its potential consequences. Sara suggested that since Dr. B had booked the case as a last minute "emergency" addition, the signature of two physicians would fulfill the hospital's policy criteria. Dr. B refused and began to become belligerent.

Sara asked to see a copy of the policy and was informed that it was not currently available in the OR as it was being rewritten. After further discussion between the OR manager and the surgeon, Sara was instructed to obtain consent over the phone from the mother. Sara stated that the surgeon should make this call, as he would be best able to explain the patient's medical situation and ensure the mother was giving an informed consent. The surgeon turned and left in a rage. The OR manager instructed Sara to call the mother and to explain that her daughter was going to have surgery. Sara reluctantly agreed to make the call if the OR manager would also listen to the telephone conversation and co-sign the documentation about the incident. Dianne was hesitant to divulge her mother's telephone number but eventually agreed to do so. The call was made in Dianne's presence and the medical and surgical situation was fully explained to the mother. The mother's response was "Do whatever you need to do". The entire incident was documented and signed by both Sara and her manager.

Dianne claimed, when asked, to have no further questions about the surgery. Sara transported Dianne into the OR where the procedure was completed with no complications. Sara was very uncomfortable with the situation. She was the mother of three teenage children and would have likely initiated a formal inquiry if one of her children had undergone a surgery without her consent. Sara thought about all the possible

complications that could occur during this patient's surgical experience and was very skeptical as to whether or not a court would find the mother's telephone consent to be legal. Sara meticulously and comprehensively documented the details of the case on the official operative detail and, later that evening, in her personal journal.

VALID INFORMED CONSENT

It is illegal for one person to touch another without that person's consent. Healthcare workers are required to touch patients in order to carry out their work. Consent from patients can be implied, verbal/oral, or written.[3] Patients imply their consent through certain behaviours – holding out an arm to have their blood pressure, taken for example. However, during this process, the onus is on the health care worker to ensure the patient understands what he/she is consenting to and why. A patient can give verbal or oral consent after a procedure has been explained – agreeing to have a PAP smear is an example of oral consent. A written consent is more tangible and deemed to be more legally useful than an implied or oral consent.[3] Informed consent is a process and signing the consent form is documentation of the process.[4,5]

For informed consent to be valid in Canada the following criteria must be met: [5,6,7,8,9]

The patient must be legally competent to consent to the proposed treatment;

The patient must possess the mental capacity to authorize the proposed care;

The patient must receive a proper disclosure of information about the procedure from the practitioner proposing the treatment;

The authorization should be specific to the proposed treatment;

The treatment must be legal;

The patient should have opportunity to ask questions about the proposed treatment and to receive understandable answers;

The consent must be genuine, voluntary, and obtained free from undue influence and coercion; and

The consent should be obtained free from misrepresentation of material information.

The patient must be legally competent to consent to the proposed treatment. In Canada the age of consent is <u>not</u> the age of majority.[5,6] (Age of majority is the age where a person is legally recognized to be an adult and has the rights and responsibilities of an adult. In some provinces, including Alberta, the age is 18 years. In other provinces the age is 19 years.) Canadian common law recognizes the *rule of seven*. This rule says children under seven years of age are totally dependent on caregivers. Children seven to fourteen years are presumed capable of taking on some responsibility for their own actions and fourteen to twenty-one are responsible individuals accountable for their own actions. Canada also acknowledges the *mature minor rule* where it is believed that a minor is capable of understanding the nature and consequences of their decisions.[6] If, however, this is challenged the law determines, in a case-by-case fashion, whether a child is capable of understanding the nature and consequences of the treatment or procedure.

Putting this information into the context of the case study it would seem that Dianne is legally competent to sign her own consent. However one would have to question if she was in fact capable of understanding the nature and consequences of having a cholecystectomy under a general anaesthetic. Was the surgeon able to assess her level of competence in the 20 minutes he saw her in the emergency department? Did Dianne's surgical and general life experiences allow her to fully understand the impact of the surgery? If there had been an adverse event during the procedure it is possible that legal litigation could have resulted if family and/or a legally appointed guardian pursued it. This is an example where the *rule of seven* and the *mature minor rule* might be interpreted differently by various professionals. There was no documentation on Dianne's chart to support the finding that she was thought to be legally competent and therefore able to sign the consent.

The patient must possess the mental capacity to authorize the proposed care. This refers to the intellectual ability to reason – the ability to make a choice. It is presumed that all patients are mentally capable until found otherwise. Severe pain that compromises the ability to think, excessive consumption of drugs or alcohol, or a diagnosed mental disability are examples of criteria that could make a patient incapable of signing their own consent.[6]

From the facts that were disclosed in the case study there seems to be no reason to think that Dianne was mentally incapable of signing the surgical consent. However, it could be questioned as to whether or not she had the linguistic ability to comprehend what she was being told about the expected surgical experience. Did the surgeon explain the procedure and postoperative expectations in language that a 14 year old could easily comprehend and internalize? There was no documentation, other than the signed consent form, explaining how this particular process was carried out.

The patient must receive a proper disclosure of information about the procedure from the practitioner proposing the treatment. This is the most important criterion for a valid, informed consent and it means that a person must be given sufficient information, in understandable language, to make an informed decision. It is based on the 1980 Supreme Court of Canada case of Reibl v. Hughes, which found that proper disclosure describes

…what the average prudent person, the reasonable person in the patient's particular position, would agree to or not agree to, if all material and special risks of going ahead with the surgery or forgoing it were made known to him[5,6]

This information is to include the proposed procedure's nature and purpose; the risks and benefits; alternatives; impact on lifestyle; economic impact; who will perform the procedure and what their experience is; and consequences of refusing the procedure.[5,6]

It would appear that Dianne had some knowledge of the cholecystectomy, as she was able to repeat her basic knowledge to Sara. But did she have full knowledge of the potential risks?[8] The onus is on the surgeon to provide this information to the patient and to evaluate the level of understanding. Sara did not assess this but should have.[7] The chart had no record of what Dianne was told or what her true level of understanding was.

The authorization should be specific to the proposed treatment. The specific procedure and who will be doing it should be indicated on the written consent. The consent form that Dianne signed specified *laparoscopic cholecystectomy possible open* to be done by Dr. B. The word *open* is ambiguous and likely would be questioned if litigation were to arise. Perhaps the wording should have been more specific and read *laparoscopic cholecystectomy possible cholecystectomy by laparotomy*.[6]

The treatment must be legal. There is no question, that a cholecystectomy is a legal procedure in Canada.

The patient should have opportunity to ask questions about the proposed treatment and to receive understandable answers. Patients must have ample time to synthesize the information told to them. A 'rush job' between disclosure and the decision to undergo treatment is not tolerated in Canadian law.[6] Patients must be given time to formulate questions and receive appropriate answers prior to consenting.

The conversation between Dianne and Dr. B was not witnessed nor was the content of the discussion documented. It is unknown if these criteria were met. Dianne was not willingly conversing with Sara in the holding area and she denied having any questions about the surgery when asked. It is unknown whether or not she had questions or if she just did not want to talk to anyone. What is known, though, is that a short period of time existed between the signing of the consent and the actual surgery.

The consent must be genuine, voluntary and obtained free of undue influence and coercion. This means the consent must be given voluntarily. There was no reason to believe that Sara did not give voluntary consent. However, it is known that patients trust and respect healthcare providers and may sign a consent because they fully trust the surgeon who is suggesting the surgical procedure.

The consent should be obtained free from misrepresentation of material information. This suggests that whomever obtains the consent (the practitioner who is going to perform the procedure) must not knowingly leave out details about the procedure or present them in a misleading fashion.[6]

In the case study involving Dianne there was no documentation or witness to the consent process. Therefore, there is no way of knowing if these criteria were met.

MORAL MODEL FOR ETHICAL DECISION MAKING

Nurses contend with ethical situations on a daily basis. The Canadian Nurses Association recognizes this and has provided all nurses with a Code of Ethics to guide them during these situations.[1] There are several models for ethical decision-making in nursing practice.[2,10,11] The *MORAL model for ethical decision making* is perhaps the easiest model for nurses to remember as each letter of the acronym represents a step in the decision-making process.[2]

M - *Massage the dilemma.* Identify and define the issues and consider the options of the major people affected. In this case study Dianne has a diagnosis of cholecystitis. She is in no apparent physical distress. Cholecystitis does not usually require emergency surgery. For reasons unknown to the staff of the surgical suite, she has recently run away from her home. Dianne has a right to confidentiality.[2,12,17] The reason she ran away is unknown. Therefore should the mother have been included in the consent? Should Family and Children's Services have been involved? If so, the mature minor rule may not apply. In Alberta this right is lost if the patient is subject to children's welfare legislation. (Note: Each province has its own legislation concerning this issue.[6])

Dr. B. is a skilled and regarded surgeon who believed Dianne needed immediate surgical treatment. Emergency surgery is done to prevent serious injury or to preserve life.[13] Sara understood she was legally and professionally responsible and accountable for her actions. She believed that the consent process had not been completed and, as a patient advocate, she believed the patient's best interests were not being addressed. An option to suite all stakeholders (patient, family, perioperative nurses, surgeon, surgical assistant, anaesthetist, OR manager(s) and administrator(s), and any other person who would be directly affected by or involved in this patient's surgical experience) would be to delaying the surgery until the consent process was thoroughly reviewed.

O - *Outline the options.* Options, in this case, include performing the surgery immediately or delaying it. It would seem that delaying the surgery until the consent process was complete could have been a viable option so long as Dianne was not in immediate danger from the delay.

R - *Resolve the dilemma* by applying the principles of ethics to the identified issues and options. Principles of ethics include: autonomy (personal freedom); beneficence (to do good); nonmaleficence (to do no harm); veracity (complete truth); justice (equal and fair treatment); paternalism (assisting persons to make decisions when they do not have sufficient data or expertise); fidelity (keeping promises and commitments); and respect for others (the highest principle, incorporating all of the other principles).[2] These principles should to be addressed from the perspective of each stakeholder.

A - *Act* by implementing the chosen option. In Dianne's case, it may mean delaying the surgery.

L - *Look back and evaluate the process.* Was the process successful or should it be modified in future?

Continued on Page 14

IFPN Announces President Elect

International Federation of Perioperative Nurses (IFPN) is delighted to announce that James Harrison, of Australia, is the President Elect of IFPN (effective February, 2006). He will assume the Presidency of IFPN at the October 2006 Meeting of IFPN.

James was a Board Member of IFPN from September 2003 to September 2004 and, prior to this position, he was a member of the *Council of National Representatives* (CNR) in his capacity as President of *Australian College of Operating Room Nurses* (ACORN).

James currently works as a Manager of Clinical Services and a Registered Nurse in Operating Theatres in Tasmania, Australia.

IFPN
International Federation of Perioperative Nurses

The process of ethical decision-making is not simple. It requires the cooperation of all stakeholders.

POSSIBLE LEGAL REPERCUSSIONS

Touching another person's body without their consent is illegal and can result in civil liability or criminal charges such as battery or trespass. The legality of Diane's consent is debatable and as a result one could question if the surgical team had legal permission to touch her body. Had there been an adverse event during her surgical experience the family and/or an officially appointed guardian could choose to legally pursue these questions in court.

Malpractice is the term used when a skilled and educated professional fails to act in a reasonable manner.[2,10] A judge determines if the action was reasonable by evaluating how other professionals, with the same level of education and skills, would perform in the same situation. Physicians and nurses are professionals governed by their respective professional bodies and are all accountable, responsible, and liable for their actions.[1,7,12] Many consent forms contain a clause giving the surgeon permission to alter the planned surgery should an unforeseen operable circumstance arise intra-operatively. However the surgeon who knowingly operates, beyond what has been consented to (without justification) and the nurses who knowingly participate in the procedure are equally liable.[3]

The hospital employing the nurses in this case could also found vicariously liable.[13, 16] Under Canadian law, employers have a responsibility to monitor and control their employees conduct.[5,16] Hospitals have a duty to their patients to provide competent nurses.

Risk Management Strategy and Potential Evaluation

Risk management is a process that identifies, analyses, and treats potential hazards, such as the risk of injury, loss, and malpractice in the workplace.[2,14] A risk management program should include the:

- identification and prioritization of risk areas;
- establishment of practice criteria collected from measurable data;
- implementation of practice strategies; and
- evaluation of the risk management program.[14]

These elements can be applied, as follows, to the case presented in this article:
The primary risk area is allowing young teenagers to sign their own surgical consents without documenting the essential elements of the consent process.[3,11,14] A hospital's priority is to provide evidence of the care given to patients. Complete documentation contributes to such evidence.

Establish a policy that clearly defines the consent process, meets legal criteria and includes age-specific provisions. The policy should outline each step of the consent process and how it should be documented.[8] This would provide a framework to ensure that the required elements of the consent process had been legally met.[5] The policy should be made available to all health care providers at all times.

Implement the policy. This may include denying practice privileges to those individuals who do not comply with the written recommendations.

Re-evaluate, on a regular basis, to ensure that the policy remains consistent with current laws. Evaluate if the policy has, in fact, prevented the risk of malpractice for the professionals involved and the risk of vicarious liability for the employing institution. Evaluations should be written, retained, and readily accessible so they may be referred to for legal or quality assurance purposes.[15]

CONCLUSION

Ethical-legal dilemmas can arise when obtaining valid informed consents from young teenagers. The case of a 14-year-old run-away girl (Dianne) who had signed her own surgical consent for a cholecystectomy has been presented and analyzed. The elements for a legal informed consent were outlined and related to Dianne's case. Her consent was assessed for validity. Using the *MORAL model for ethical decision-making* the ethical implications of this case study were briefly analyzed. Possible legal repercussions were also addressed. A risk management strategy (suggested policy and documentation protocols for the consent process) was proposed and an evaluation method briefly discussed. Ethical-legal problems are not uncommon in the delivery of healthcare and they need to be identified and prudently managed in order to prevent litigation.

IN SUMMARY:

Assessing the consent of a minor is an ethical-legal dilemma that often faces perioperative registered nurses.

Perioperative registered nurses have professional obligations to:

- Protect patients;
- Uphold professional standards; and
- Protect self and employers from liability.

To fulfill these obligations perioperative registered nurses must be aware of:

- Frameworks for ethical-legal decision-making;
- Criteria for informed consent by a minor in their own jurisdictions;
- Roles and responsibilities for obtaining informed consent; and
- Their own hospital's policy and procedures.

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INTERNATIONAL FEDERATION OF PERIOPERATIVE NURSING (IFPN)

Activities from Around the World

Author: *Kate Woodhead RGN DMS Chairman National Association of Theatre Nurses 1998-2001 Vice President IFPN 2001-2003, President IFPN 2003 to date. Kate has worked in perioperative practice since 1978 and currently runs her own consultancy business (speciality – perioperative practice and management) .*

The International Federation of Perioperative Nurses (IFPN) was launched in September 1999 in Helsinki, Finland. IFPN is the only international perioperative organisation to be a member of the International Council of Nurses (ICN) and represents approximately 100,000 perioperative nurses worldwide. ORNAC was a founding member of IFPN and continues to contribute significantly to its progress. Margaret Farley, recent Past-President of ORNAC, is currently serving as an IFPN board member. Other member organisations are Australia, Japan, Kenya (supported by Canada), New Zealand, South Africa, Thailand, the UK, and the USA. Papua New Guinea is a Pre-member.

EDUCATIONAL ACTIVITY

The mission of IFPN is to support perioperative nurses globally in order to improve patient care.

IFPN promotes knowledge-based practice, research and education in collaboration with its member organisations, though the writing and distribution of *Guidelines for Practice* (soon to be available free at www.ifpn.org.uk). An *International Perioperative Code of Ethics* is available as a free download from the IFPN website. Position statements are available concerning the nurse's right to personal protective equipment during surgeries and regarding the use of child labour in instrument manufacturing.

IFPN seminars have been held at conferences in Australia, the UK, and the USA. Future seminars are scheduled for the UK (October 2006), Canada (2007), and South Africa (2009) ensuring international educational input for perioperative nurses in better-resourced healthcare systems. IFPN has also made small financial gains, during these events, as a result of profit sharing with the host organisations.

IFPN's **new** online journal is now available as a free download, through the website. This will be the first international perioperative journal and is to be titled *The International Journal of Perioperative Care.*

IFPN believes in supporting perioperative nurses around the world, but especially those in developing countries where little or no specialist continuing education is available. Support includes educational opportunities and items free of charge. ORNAC's support of the perioperative chapter of Kenya's National Nurses Association is an example of how larger organisations can help others. Kenya benefits from membership in the international perioperative family and funds have also been provided to enable the development of a perioperative library. Donated books and Journals, which are distributed around Kenya, are for the benefit of rural perioperative nurses who would otherwise have little access to continuing education.

Papua New Guinea (PNG) Project is a further example of the benefit of sharing good practice within an international perioperative organisation. This nation of islands, located in the eastern Pacific Ocean, hosted an IFPN workshop, in 2004, with the specific purpose of assisting in the creation of their own national organisation. Now, with IFPN's guidance, they hold an annual educational workshop and annual general meeting. Their mandate is to provide education to perioperative nurses around the country and to influence government policy that might affect nurses working in the surgical environment. Once the organization has ratified its constitution it will be eligible to join IFPN as a full member. For more information about IFPN's annual visits to PNG, or other IFPN activities, visit www.ifpn.org.uk.

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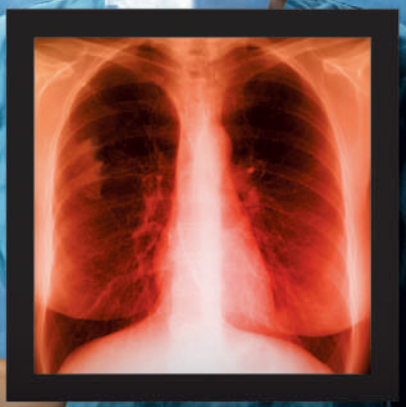

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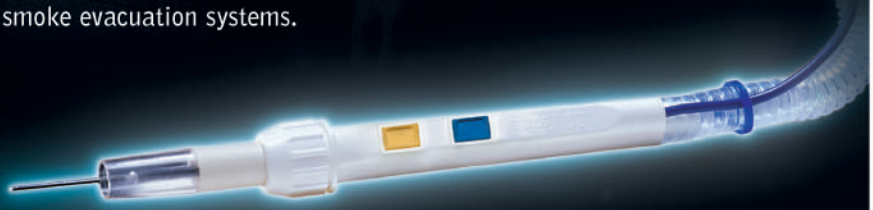

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Abstract submissions should have a maximum of 150 words on a single-spaced page, typed in a size-12 font. The abstract heading should include: title, author(s) name(s), institution name, city, province, contact information, and specific field of focus.

Please send three (3) **copies** of the abstract by September 15, 2006, to:
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LETTING IT OUT OR KEEPING IT IN
Our Expectations of Assertiveness

Author: *Carole Payette, 2005 National Conference presenter and accredited instructor, is the founder CP Stratégie, a personal development agency in Longueuil, QC. She teaches the Commercial and Technical Representative program at CÉGEP Saint-Laurent, is a certified Competent Toastmaster (CTM) of Toastmaster International. She can be reached at cpstrategie@videotron.ca.*

One of the things I had found most difficult to accept in life is the fact that I couldn't change others. When I realized that I hadn't been asserting myself and decided to do so, I thought it would change people's unpleasant attitudes towards me. What disillusionment and disappointment I felt when I saw that, more often than not, my assertions changed absolutely nothing and I was getting hurt.

One day I realized what wasn't working in my assertive approach: I still expected the people I interacted with to change. That's **"Expect" with a capital "E"**. We can't change others, only ourselves.

Since then each time I make an assertive statement I remember that I do it for myself, to feel good, out of self-respect, and to avoid saying things like "I really should have". The result? People's attitudes change. Originally I was doing it so that **others** would give me what I wanted, so that **others** would respect me, etc. There is a big difference between "**to be respected**" and "**to respect oneself**": in the first instance my expectations are of others, in the second I recognize an essential personal need.

Life can be magical when we do things for ourselves; we receive so much more than we could have imagined.

Go ahead, try being more assertive and you'll be surprised at the results.

S'AFFIRMER OU S'LA FERMER
Nos attentes dans l'affirmation

Auteure: *Carole Payette, présentatrice à la Conférence nationale 2005 et formatrice agréée, est fondatrice de CP Stratégie, une agence de développement personnel à Longueuil, QC. Elle enseigne au programme « Représentant commercial et technique » au CÉGEP Saint-Laurent et est Toastmaster diplômée (CTM) au Club Toastmaster International. Pour plus de renseignements, la rejoindre à cpstrategie@videotron.ca.*

Une des choses les plus difficiles qu'il m'est été d'accepter dans ma vie est que je ne pouvais pas changer les autres. Quand j'ai pris conscience que je ne m'affirmais pas et que j'ai pris la décision de le faire, que les personnes dont je trouvais leurs attitudes déplaisantes à mon égard changeraient. Quelle illusion et quelle déception de m'apercevoir que plus souvent qu'autrement cela ne changeait absolument rien et j'étais de plus en plus blessée.

Un jour j'ai pris conscience que ce qui ne fonctionnait pas dans mon affirmation était que j'avais toujours des attentes face aux personnes à qui je m'affirmais. Je m'attendais à ce qu'il change et **attente = Attente avec un grand A**, nous ne pouvons pas changer les autres seulement soi-même.

Depuis ce temps à chaque fois que je m'affirme je prends conscience que je le fais pour moi, pour me sentir bien, pour me respecter, pour ne plus m'entendre dire des phrases comme « j'aurais dont dû », chose curieuse l'attitude des personnes autour de moi change. Antérieurement je le faisais pour **qu'on** me donne ce que je veux, pour **qu'on** me respecte, etc. il y a une grande différence entre « **pour qu'on me respecte et pour me respecter** » dans la première j'ai une attente de l'extérieur dans l'autre c'est un besoin intérieur essentiel.

C'est magique la vie quand nous faisons les choses pour nous elle nous donne plus que nous aurions pu l'imaginer.

Affirmez-vous pour vous, vous m'en donnerez des nouvelles.

THE GATEKEEPERS

By: Irene Govis

It has been nine years since I entered those
intimidating OR doors.
I was looking for adventure and needed to
get rid of those night shift tours.
I was greeted by Nurses wearing outfits
they didn't have to buy.
Green suits, blue hats and masks which
concealed the face but revealed the eye.

And those eyes spoke words
without making a sound.
I was not prepared for this new
world and feared that I would drown.
Each day became more painful then the one before.
As the grueling process began behind the OR door.

Not only were the tasks so different
then I was accustomed to.
I had to learn a new language
in order to get through.
The COMMANDS came from every direction.
I sought out allies for my protection.

I thought, "Who are these people
telling me what to do? I've been
nursing for twelve years, I'm not NEW!"
Keep your front to the case at all times.
You need to wear a mask past these lines.

Close that door before you open the case.
Count a little faster keep up the pace.
Tuck your hair up under your hat.
You can't wear jewelry you should know that.

Did those scissors touch that bowel?
Don't you know where to find the Jowel?
Check that indicator, make sure it has turned.
My God you've done this before,
what have you learned?

I'd go home each night and wonder what in the
world I was doing working with nurses who
displayed such ritualistic behaviour.
Thinking I was being picked on personally,
constantly looking for my saviour.
Until it all came together in the middle of my
journey, when I least expected it.
These nurses aren't here to destroy me, but rather,
they are here as the patient's advocate.

They are the Gatekeepers of
an amazing organization.
The Nurses of the
Operating Room Congratulations.
I get it now, I'm proud to say.
I too have become a Gatekeeper
and have found my way.

Each of us has a professional responsibility.
To keep the gates closed to
protect the OR's integrity.
We are the leaders in an area of profound criticism.
Our actions reflect on our patient's lives with
insurmountable realism.

The "Anal" ways do have a place.
We just need to pass them on with grace.
The ORNAC standards have guided my way.
Allowing me to stay focused and never stray.

We need to return to the roots of the OR BIBLE.
So that we may maintain our professionalism and
ultimately our Survival.

L'OZONE – LE DERNIER DÉVELOPPEMENT DANS LA STÉRILISATION DES DISPOSITIFS MÉDICAUX

Auteur : *Lorna Murphy, infirmière autorisée, baccalauréat en sciences infirmières, infirmière clinique, TSO3.*

RÉSUMÉ

Combien de fois avez-vous connu un retard dans une procédure dans la salle d'opération parce que les instruments nécessaires se trouvaient encore dans le stérilisateur? Dans votre rôle d'infirmière de salle d'opération vous connaissez sans doute trop bien la pression ressentie pour rendre disponibles à tout moment les instruments parfois peu nombreux.

En 2003, une société canadienne a développé une procédure de stérilisation unique se servant de l'ozone en tant qu'agent de stérilisation. Cette technologie présente un choix rapide, économe et sans danger qui pourrait remplacer les autres méthodes de stérilisation à basse température et diminuer la pression ressentie lorsque le besoin d'instruments excède leur disponibilité.

Cet article traitera des principes et du cycle du stérilisateur ainsi que des bénéfices de cette technologie.

OZONE - THE LATEST ADVANCE IN STERILIZATION OF MEDICAL DEVICES

Author: *Lorna Murphy RN, B.Sc.N., Nurse Clinician, TSO3.*

ABSTRACT

How many times have procedures in your operating rooms been delayed because the instruments needed were still in the sterilizer? As Perioperative nurses you are likely to be quite familiar with the constant pressure to ensure that scarce instrumentation is available when needed.

In 2003, a Canadian company developed a unique sterilization process employing ozone as the sterilizing agent. This technology is a safe, rapid and economical alternative to other low temperature sterilization modalities and may relieve some of the pressure experienced when instruments in short supply are in high demand.

This article will discuss the principles of the sterilizer and the cycle and will explore the advantages of using this sterilization technology.

Courtesy TSO3

Ozone Sterilizer

INTRODUCTION

The field of sterilization has recently grown to admit a newcomer in low temperature sterilization technology. A Canadian company, based in Quebec, received Health Canada and FDA clearance in the autumn of 2003 to market a breakthrough technology using ozone as the sterilant. The company's first product is a sterilizer with a four cubic foot (125 litres) chamber capacity.

OZONE

In 1840 C.F. Schonbein, first discovered ozone and took the Greek word ozein as the root for the name. Ozein means 'to smell'[1] which acknowledges ozone's distinctive odour.

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metastable, meaning that it is stable for short periods of time. In its gaseous state, ozone is readily soluble in water and is highly oxidative. Oxidation is defined by the United States Environmental Protection Agency as a 'chemical reaction in which oxygen unites or combines with other elements.'[2] Since it is highly oxidative, ozone readily enters into this chemical reaction. This characteristic, combined with its solubility, makes it an excellent candidate for use as a sterilant.

In the earth's atmosphere, ozone is produced naturally from oxygen in the upper stratosphere through the absorption of the sun's ultraviolet radiation.[3] The ozone molecule is heavier than air and falls towards the earth's lower atmosphere, attaching to other airborne particles during its descent. Once attached, the ozone molecule reacts with the particle and oxidizes it, cleaning and purifying the air. It is this action that gives ozone its label as Mother Nature's purifier and gives rise to the clean fresh smell following a rain storm.[4]

When found in the lower atmosphere, ozone is formed by the reaction of solar radiation with noxious gas or hydrocarbons released by factories and automobiles.[3] As a result, it is a component of smog found in highly industrialized and populated areas.

Ozone can also be produced mechanically. A photocopy machine will produce ozone if the machine is copying large quantities.[5] Ozone is also produced by welders when they use an electrical arc. Levels established for ozone toxicity in humans is based on welder's exposure levels to ozone.[6]

Today ozone is employed in many beneficial ways. Ozone has long been recognized as a safe disinfectant for water and food. It is safely used in both gas and liquid forms as an antimicrobial agent in the treatment, storage and processing of foods, including meat and poultry. In addition, there are over 3000 municipalities using ozone technology to purify their water and sewage.[7,8,10] Los Angeles has one of the largest municipal ozone water treatment plants in the world![7,9] Companies selling bottled water use ozonated water to sterilize their containers[7,8] and Olympic organizing committees have used ozone to purify swimming pools since 1984.[9]

Steam, hydrogen peroxide and peracetic acid are also examples of sterilization technologies that are based on oxidative capabilities. Ozone's oxidative capacity is greater than hydrogen peroxide and peracetic acid, thus making it a stronger and more effective sterilant. Substances such as fluorine, fluorine dioxide, hydroxyls radicals, and atomic oxygen have higher oxidative potential than ozone but to date a method for harnessing them for productive use has not been developed.[11]

Establishing the efficacy of the technology

In order to bring a new sterilization technology to the market in North America, the product's capabilities must be demonstrated under certain conditions.[12, 13] The primary requirement is to demonstrate the sterilizer's capacity to kill microorganisms. The required tests are:

- Achieve a Sterility Assurance Level (SAL) of 10?[6]
- Pass the American Association of Official
- Analytical Chemists (AOAC) sporicidal test, originally developed for a liquid chemical sterilant.
- Conduct simulated use tests
- Demonstrate ability to sterilize narrow stainless steel lumens and items with complex geometry such as hinges etc.
- Sterilize actual medical devices in hospital environments ('in-use testing').

The company that developed ozone sterilization technology passed all these required tests and has demonstrated the ozone sterilizer's excellent capacity to achieve sterilant contact between mated surfaces.

Generating the ozone

Ozone is relatively easy to generate artificially. In 1857, von Siemens developed the first industrial ozone generator based on coronal discharge.[14] The ozone sterilizer uses this principle to generate ozone for use as the sterilant.

Glass rods are filled with oxygen gas and a high voltage electrical current is applied to the space between the rods. An electrostatic plasma field is formed, exciting the oxygen molecules and causing them to break apart and recombine as ozone.[14]

The sterilizer cycle

The ozone sterilizer requires water, oxygen and electricity. The sterilization cycle is composed of four phases – vacuum phase, humidification, injection, and exposure. Each phase is run twice, followed by a ventilation phase. The cycle time is approximately 4 1/2 hours.[15]

When the door of the chamber is closed and the cycle is started, the chamber and contents are warmed to a uniform temperature. When this pre-conditioning is completed the first phase of the sterilization cycle begins.

The first phase is the **Vacuum phase**. A vacuum of approximately 1 Torr (Torr - a unit of pressure equal to 133.3 pascals or 1/760 of an atmosphere[14]) is drawn in the chamber.

The next phase is **Humidification**. The load is humidified with approximately 60 milliliters of water vapour to facilitate the action of ozone on microorganisms. This is followed by the Injection phase where ozone is injected into the chamber. The concentration of ozone is controlled to 160 – 200 mg/L.

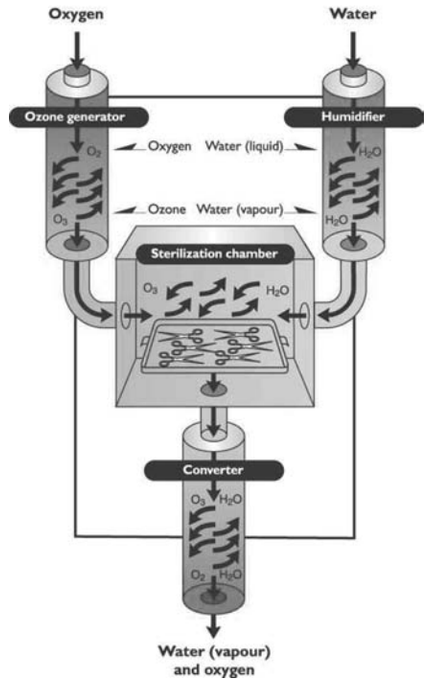
The instruments are exposed to ozone for a fixed time period during the **Exposure phase**. This sequence, vacuum, humidification, injection and exposure are repeated. At the completion of the second exposure phase, the sterilizer moves into the ventilation phase to remove ozone from the devices and the chamber.[15]

During the **Ventilation phase** a catalytic convertor converts the ozone to oxygen and any residual humidity to water vapour. These are safely exhausted into the room through an outlet on the side of the machine. No abatement is necessary.[15]

The cycle operates between 25 and 35°C (the coldest low temperature sterilization technology available today). Instruments are ready for use at the end of the cycle. They do not require a cool down period or any aeration time before they can be handled or used.

Figure 1 provides an illustration of how ozone is generated, water is humidified and how both are converted into oxygen and water vapour.

Figure 1 – Flow Diagram



Courtesy TSO3

A) Water in liquid form is heated until it becomes water vapour and enters the chamber during the humidification phase.
B) Medical grade oxygen is released into the ozone-generator and subjected to an electrical current, causing the oxygen to convert to ozone. The ozone is released into the chamber during the Injection phase and is held for a set period of time during the Exposure phase.
C) During Ventilation a convertor catalyses residual ozone into oxygen and exhausts both oxygen and residual water vapour into the room.

Monitoring the cycle for quality assurance

As the cycle progresses through each phase the display screen located on the front of the sterilizer provides a graphic read-out. In addition, a printout of the cycle parameters is provided at the completion of each cycle. Should the sterilizer detect and diagnose a malfunction, it will abort

the cycle. The printout will indicate that the cycle was aborted and the cause. See Figure 2 for a completed cycle printout. The operator can also manually abort a cycle. A sample printout of this event is shown in Figure 3.

Figure 2

```
                125L-03-0025
--------------------------------------
          Date: 2004/07/05
          Cycle number: 000171
          Load ID: 000000
--------------------------------------
Cycle start at: 16:18:52 hms

1 VACUUM PHASE:    Pressure: 0001 torr
                   Duration: 00:42:28 hms

2 HUMID. PHASE:    Pressure: 0035 torr
                   Duration: 00:50:01 hms

3 INJECT. PHASE:   O3 conc.: 0186 mg/L
                   Pressure: 0421 torr
                   Duration: 00:39:52 hms

4 EXPOS. PHASE:    Pressure: 0421 torr
                   Duration: 00:15:00 hms

5 VACUUM PHASE:    Pressure: 0001 torr
                   Duration: 00:21:53 hms

6 HUMID. PHASE:    Pressure: 0035 torr
                   Duration: 00:50:00 hms

7 INJECT. PHASE:   O3 conc.: 0187 mg/L
                   Pressure: 0418 torr
                   Duration: 00:39:48 hms

8 EXPOS. PHASE:    Pressure: 0418 torr
                   Duration: 00:15:02 hms

9 VENT. PHASE:     Duration: 00:18:43 hms

Door unlocked at: 21:11:43 hms
Total cycle duration: 04:52:51 hms

OPERATOR I.D.: 0000

Name:
--------------------------------------
Cycle Completed: 21:11:43 hms
Cycle number: 000171
```

Courtesy TSO3

Printout of a complete sterilization cycle

Figure 3

```
                125L-02-0004
--------------------------------------
          Date: 2004/07/08
          Cycle number: 004486
          Load ID: 000000
--------------------------------------
Cycle start at: 14:00:38 hms

1 VACUUM PHASE:    Pressure: 0001 torr
                   Duration: 00:42:10 hms

2 HUMID. PHASE:    Pressure: 0001 torr
                   Duration: 00:08:50 hms

9 VENT. PHASE:     Duration: 00:15:44 hms

Door unlocked at: 15:07:27 hms
Total cycle duration: 01:06:49 hms

OPERATOR I.D.: 0000

Name:
--------------------------------------
Manually Aborted: 15:07:27 hms
Cycle number: 004486
```

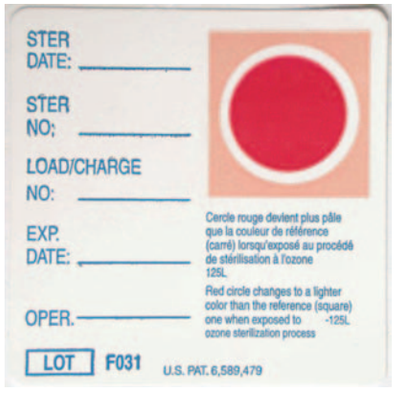
Courtesy TSO3

Printout generated in a cycle aborted by the operator

INDICATORS

Chemical and biological indicators are available for quality assurance monitoring of the cycle (see Figure 4 & 5). The chemical indicator (CI) is provided on a roll and has covered adhesive backing. There are two options for application. The CI can be applied to the peel pouch or wrapper by removing the adhesive cover. Alternatively, the backing can be left in place and the CI can be positioned on the outside of a rigid container, or inside a pouch and/or container.

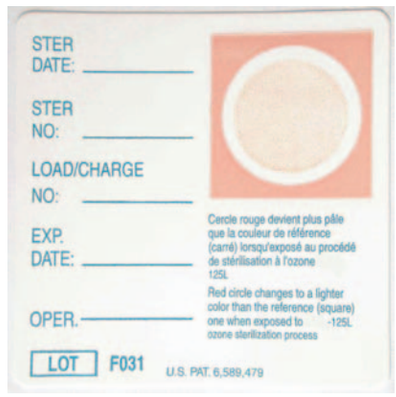
Figure 4



Courtesy TSO3

Chemical indicator – unexposed. Inner circle is darker than outer square.

Figure 5



Courtesy TSO3

Chemical indicator – exposed. Inner circle is lighter than outer square.

BIOLOGICAL INDICATORS

The self-contained biological indicator (BI) used for the ozone sterilization process contains spores of *Geobacillus stearothermophilus* which have been found to be most resistant to the sterilant. The BI can be used alone or inside a

Continued on Page 37

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Isabelle Adams Award For Excellence In Perioperative Nursing

This award was established, in 1987, on the initiative of the Operating Room Nurses Association of Quebec. Ms. Isabelle Adams was a perioperative nursing leader who was instrumental in initiating the first national Operating Room Nurses conference in 1970 in Montreal. She also participated in the OR Nurses Standards Committee of the Canadian Standards Association. Ms. Adams was an inspiration to young nurses considering the Perioperative specialty and she promoted excellence in practice throughout the specialty.

The Isabelle Adams Award is presented to an outstanding Perioperative Nurse, who has made a significant contribution to operating room nursing in Canada. The award is presented at the biennial ORNAC national conference to an OR nurse whose professional life reflects the practices and ideals of Ms. Adams.

Application forms may be obtained from the chairperson of the ORNAC awards committee or through the ORNAC website at:

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Le Prix D'Excellence En Soins Périopératoires Isabelle Adams

Ce prix fut créé en 1987 par l'Association des infirmières et infirmiers de salle d'opération du Québec. Mme Isabelle Adams était un des chefs de file dans le domaine des soins périopératoires et a joué un rôle primordial dans l'organisation de la première Conférence nationale des infirmières et infirmiers périopératoires à Montréal en 1970. Elle était également membre du comité de normalisation des soins périopératoires de l'Association Canadienne de Normalisation. Mme Adams était source d'inspiration pour les jeunes s'intéressant au domaine des soins périopératoires tout en visant l'excellence dans sa propre pratique.

Le Prix Isabelle Adams est décerné à une infirmière ou infirmier s'étant distingué par sa contribution au domaine des soins périopératoires au Canada. À la Conférence bisannuelle de l'AIISOC, le Prix est remis à une infirmière ou un infirmier de salle d'opération dont la pratique professionnelle suit les principes de Mme Adams.

Pour procurer un formulaire de demande, veuillez contacter la présidente du comité de prix de l'AIISOC.

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ORNAC / Johnson & Johnson
Medical Products Bursary for OR Nurses

This bursary was established to financially assist *ORNAC* members in furthering their education in areas that will enhance the perioperative nursing practice.

Up to **$1,500** is awarded each year to one or more successful candidates. The name(s) of the recipient(s) is announced at the *ORNAC* National Conference or at the Provincial Conference of the recipient(s).

Johnson & Johnson

Funding is available for post-basic operating room nursing programs approved by *ORNAC* and also for Baccalaureate, Masters, and Ph.D. nursing programs that are considered an enhancement to existing perioperative employment.

ORNAC recognizes that the education of perioperative nurses plays a pivotal role in creating a successful national organization and appreciates the financial support of *Johnson & Johnson Medical Products*.

SUBMISSION DEADLINE IS JANUARY 15th

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Bourse de l'AIISOC/Johnson & Johnson
Medical Products Bursary
pour les infirmières et infirmiers de salle d'opération

Cette bourse a été établie pour assister aux membres de *l'AIISOC* poursuivant leur formation dans un domaine pouvant enrichir la pratique des soins périopératoires.

Jusqu'à **1 500 $** est présenté chaque année à un ou plusieurs candidats. L'identité du ou des récipiendaires est annoncée à la conférence nationale de *l'AIISOC* ou à la conférence provinciale du ou des récipiendaires.

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Ce financement est disponible pour les programmes périopératoires post-diplôme, de baccalauréat, de la maîtrise ou de doctorat approuvés par *l'AIISOC* jugés pouvoir enrichir le rôle périopératoire actuel du ou des récipiendaires.

L'AIISOC reconnaît que la formation des infirmières et infirmiers périopératoires joue un rôle esentiel dans la création d'un organisme national et est reconnaissant de l'appui financier de *Johnson & Johnson Medical Products*.

LA DATE LIMITE DES SOUMISSIONS EST LE 15 JANVIER

Pour les critères de soumission ou une demande de bourse,
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test pack for routine testing purposes. The vial must be incubated at 56°C for 48 hours to obtain a final indicator result.[15,16]

Figure 6

Courtesy TSO3

Biological Indicator – unexposed/no growth. Colour is purple.

Figure 7

Courtesy TSO3

Biological Indicator – evidence of growth. Colour changes to yellow.

Safety and the Ozone Sterilizer

The sterilizer's design limits the worker's risk of exposure to the sterilant. There is no handling of toxic chemicals since a fresh supply of ozone is produced by the sterilizer during each cycle run. Additionally, the chamber is under negative pressure during the cycle. If there is a leak, air will flow into the chamber; ozone will not flow out. No special protective respiratory equipment is required when working around the sterilizer.[15] Software has been developed to control the electromechanical components of the sterilizer, the touch screen and the printer. The sterilizer is controlled by a programmable logic controller (PLC). All critical process parameters are monitored during the cycle and if one of the critical parameters is not reached, the cycle will abort.

Once a cycle is aborted, whether by the operator or automatically by the sterilizer; the cycle will move into the ventilation phase to remove any ozone in the chamber, convert it to oxygen before unlocking the chamber door and permit access to the load. The sterilizer possesses a single standard cycle for all medical devices to reduce the risk of operator error.

The by-products of the cycle are oxygen and water vapour. There are no toxic residuals produced; therefore, there is no danger that toxic residuals could remain on instrumentation and potentially harm patients or staff.[15]

Since oxygen and water are the only by-products there is no need to recapture and scrub the exhausted gases with expensive equipment. The environment is not harmed by the oxygen released at the end of the cycle. The process is safe for technicians, patients, devices and the environment.[15]

Operating costs for the ozone sterilizer

The unit requires oxygen, water and electricity to operate. The sterilizer can be connected to the hospital's existing oxygen network or to oxygen cylinders. The electrical requirement is 240 volts AC 60 hertz, 20 amperes dedicated circuit.[16]

Water quality requirements of the ozone sterilizer correspond to the feed water quality requirements used for steam production in steam sterilization processes. Consumption of water and electricity are minimal per cycle and the cost of the oxygen is minimal per load. Since there is no need to purchase sterilant, the cost per cycle is the most economical low temperature process available today.

Costs for consumable items such as chemical and biological indicators and packaging materials are comparable to existing products on the market.

Ozone (cont.)

There is no requirement for environmental monitoring equipment or waste gas scavenging systems.

Materials compatible with the ozone sterilizer

The ozone process is compatible with most heat sensitive reusable medical items currently sterilized by other technologies. Sterilizing sealed ampoules, liquids, natural rubber, latex, and textile fabrics are not recommended. Sterilization of implants and flexible endoscopes has not been validated at this time.[15,16]

The ozone process is compatible with current packaging such as uncoated nonwoven material/polyethylene pouches and commercially available anodized aluminum containers using disposable filters.[15] It has been validated for medical devices having a single stainless steel rigid lumen with the following internal diameters and lengths:[15,16,17]

Internal diameter	Length
0.5 mm	45 cm
1 mm	50 cm
2 mm	57.5 cm
3 mm	65 cm
4 mm	70 cm

Conclusion

In today's fast paced surgical suites the ability to turn much needed instrumentation around more rapidly would be a real asset. Perioperative Nurses are certainly no strangers to budget restraints and having to make do with less. This new technology may offer an alternative and in so doing help to relieve the pressures associated with increased caseloads and too few resources.

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