



The Guiding Light

CANADIAN SOCIETY OF GASTROENTEROLOGY NURSES & ASSOCIATES

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SPHINCTER OF ODDI MANOMETRY

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ANATOMY & PHYSIOLOGY OF THE SPHINCTER OF ODDI

The sphincter of Oddi is a bundle of circular and longitudinal smooth muscle fibers, 4-6mm in length. It surrounds the ampulla of Vater, the distal common bile duct and pancreatic duct. It consists of the biliary sphincter and the pancreatic sphincter. Muscle fibers from these structures merge at the papilla to form the common sphincter.

The sphincter of Oddi has a variable basal or resting pressure which appears to be the predominant mechanism in regulating the outflow of pancreaticobiliary secretion into the duodenum. Superimposed on the basal pressure are high pressure phasic contractions that appear to aid in the prevention of duodenum-to-duct reflux. These phasic contractions are generally propagated towards the duodenum (antegrade), but retrograde and simultaneous contractions can also occur.

Alterations in sphincter of Oddi basal pressure and phasic activity regulate the entry of bile into the duodenum. After a meal, there is a requirement of bile in the duodenum for fat absorption. The gallbladder muscle contracts and the Sphincter of Oddi relaxes so that the required amount of bile can flow easily to the duodenum.

In the fasting stage, there is tonic contraction of the sphincter of Oddi. This maintains a basal tone that helps to divert bile into the gallbladder. The phasic contractions keep the sphincter segment empty. The sphincter of Oddi is not an absolute barrier, so even during fasting there is a small quantity of bile that enters the duodenum.

Changes in sphincter of Oddi tonic activity are under neurohormonal control. It has been assumed that the vagus nerve stimulates contractions of the sphincter of Oddi. It has been established that cholinergic agents stimulate contractions of the sphincter and anticholinergic agents inhibit them.

The predominant hormonal agent affecting sphincter of Oddi motility is Cholecystokinin. Cholecystokinin is released in response to fat in the duodenum. It causes contraction of the gallbladder and relaxation of the sphincter of Oddi.

SPHINCTER OF ODDI DYSFUNCTION

Sphincter of Oddi dysfunction refers to a benign, noncalculous obstruction to flow of bile or pancreatic juice through the sphincter of Oddi. It may be manifested clinically by recurrent pancreaticobiliary pain or pancreatitis. Through the years, it has been given

many names, including biliary dyskinesia, biliary spasm, papillary stenosis and postcholecystectomy syndrome.

Sphincter of Oddi dysfunction can be broken up into two pathological entities: papillary stenosis and sphincter of Oddi dyskinesia.

Sphincter of Oddi stenosis is a structural narrowing of the sphincter,

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secondary to fibrosis, either from pancreatitis or from injury during passage of a common bile duct stone with resulting mucosal hyperplasia, or to other nonspecific inflammatory conditions.

Sphincter of Oddi dyskinesia is believed to be a motor abnormality which causes a hypertonic sphincter.

Because it is often impossible to distinguish patients with sphincter of Oddi stenosis from those with sphincter of Oddi dyskinesia, the term sphincter of Oddi dysfunction has been used to incorporate both groups of patients.

Clinical Presentation

Sphincter of Oddi dysfunction relates to either the biliary or the pancreatic portions of the sphincter. There are two main clinical presentations that relate to the portion of the sphincter that malfunctions.

The more common problem is biliary sphincter of Oddi dysfunction. It is most prevalent in young and middle aged females who usually present five to seven years after having undergone cholecystectomy for cholelithiasis. Acute attacks can be associated with severe pain, as in patients with true biliary colic. The pain is situated in the epigastrium or right upper quadrant, often radiates into the back, and may be associated with nausea and vomiting. The pain generally occurs in episodes lasting up to several hours or until relieved by analgesics. These pain episodes may occur at intervals of weeks or months. Some patients also describe discomfort in the upper abdomen that is more frequent and may occur every day. The attacks of pain can occur after fatty meals and are often nocturnal. Patients may complain of sensitivity to codeine and other opiates.

Patients with dysfunction of the pancreatic portion of the sphincter present with typical pancreatic pain (epigastric or left upper quadrant radiating to the back). They have often been diagnosed with idiopathic recur-

rent pancreatitis in which no cause for the pancreatitis is apparent.

After initial evaluation, patients are commonly categorized according to the Hogan-Geenan classification system. This system was developed to classify patients with suspected sphincter of Oddi dysfunction and to help guide the appropriate utilization of sphincter of Oddi Manometry.

Hogan-Geenan classification system

The Hogan-Geenan classification system categorizes patients into three groups (types 1, 2 and 3).

Type 1 are patients with biliary-type pain, abnormal liver enzymes (elevated AP and AST) documented on two or more occasions, a dilated common bile duct greater than 12mm in diameter and delayed drainage of contrast beyond 45 minutes in ERCP.

Type 2 are patients with biliary-type pain but have only one or two of the above findings.

Type 3 are patients with biliary-type pain but no other abnormalities.

It is thought that sphincter of Oddi dysfunction is present in all type 1 patients representing true papillary stenosis. Approximately 50%-60% of type 2 patients and fewer than 10% of type 3 patients have sphincter of Oddi dysfunction based on manometry. Many experts feel that the pain in type 3 patients arises from irritable bowel syndrome.

SPHINCTER OF ODDI MANOMETRY

Sphincter of Oddi manometry is a diagnostic procedure performed during an ERCP which measures pressures within the sphincter of Oddi, common bile duct, pancreatic duct and the duodenum.

Sphincter of Oddi manometry is the only available method to measure sphincter of Oddi motor activity directly. It is considered to be the gold standard for evaluating patients with sphincter dysfunction.

Indications for Sphincter of Oddi Manometry

Patients who are classified as Type 1 most likely have sphincter of Oddi stenosis. The use of manometry is not an essential diagnostic study prior to treatment.

Patients who are classified as Type 2 may have either sphincter of Oddi stenosis or dyskinesia. Manometry is highly recommended to diagnose and direct therapy in these patients.

Patients who are classified as Type 3 usually have pain arising from functional bowel disease. Only a small proportion have sphincter of Oddi dysfunction. Manometry is mandatory to confirm sphincter of Oddi dysfunction in these patients. It is performed when the biliary-type pain persists despite investigation and treatment for functional gastrointestinal disease.

Sphincter of Oddi Manometric Values

Normal manometric values

Baseline (resting) sphincter of Oddi pressure of 15-25mm Hg

Ductal pressures of 10mm Hg above duodenal pressure

Phasic pressure waves of 50-200mm Hg with a frequency of 3-5/minute, duration of 2.8-5.8 seconds and 12-100% antegrade (toward the duodenum), 0-50% retrograde (away from the duodenum) or simultaneous in propagation direction

Decrease in sphincter pressure in response to CCK

Abnormal manometric values

Elevated basal sphincter of Oddi pressure of greater than 40mm HG

Increased ductal pressures

Increased amplitude of phasic contractions of greater than 200-300mm Hg

Increased frequency of phasic contractions of greater than 10/minute

Predominance of retrograde propagating waves of over 50%

Paradoxical increase in sphincter pressure in response to CCK

ETIOLOGY OF SPHINCTER OF ODDI DYSFUNCTION

The cause of sphincter of Oddi dysfunction and the pain mechanisms involved are uncertain.

It has been postulated that there may be defect of neural connections that coordinate the interaction between the duodenum, biliary tract and sphincter of Oddi.

It may also occur as part of a generalized motor disorder of the gastrointestinal tract.

It may occur in conjunction with other diseases such as systemic sclerosis, diabetes mellitus or chronic idiopathic intestinal pseudo-obstruction that are recognized to cause intestinal dysmotility.

It may be drug induced. The biliary tract is extremely sensitive to opiates.

It is postulated that sphincter of Oddi dysfunction causes pain by impeding the flow of bile and pancreatic juice resulting in ductal hypertension. Alternatively, ischemia arising from spastic contractions and hypersensitivity of the papilla have been proposed.

TREATMENT OF SPHINCTER OF ODDI DYSFUNCTION

Endoscopic sphincterotomy has been shown to be an effective treatment for patients with Type 1 sphincter of Oddi dysfunction.

In patients with Type 2 sphincter of Oddi dysfunction or idiopathic recurrent pancreatitis, endoscopic sphincterotomy is only effective in those with elevated basal pressures of greater than 40mm Hg.

The effectiveness of endoscopic sphincterotomy in Type 3 patients is presently unclear.

Drug therapy with nitrates and calcium channel blockers which relax the sphincter of Oddi may benefit some patients with sphincter of Oddi dysfunction. However the vasodilating side effects of these drugs often limit their therapeutic use.

The only abnormal manometric value that has so far been proven to clinically predict improvement following endoscopic sphincterotomy is an elevated basal pressure of greater than 40mm Hg.

Other values that are being studied as possible indications of sphincter of Oddi dysfunction include excessive retrograde propagation of phasic waves, gigantic phasic wave amplitudes, high frequency of phasic waves and a paradoxical response to CCK. So far none of these are being widely used clinically.

EQUIPMENT

A triple lumen manometry catheter is used. This catheter has two perfusion lumens and one aspiration/wireguide lumen. The distal end of the catheter has ten 1mm markings. Two red markings indicate the recording ports and the remaining eight are black. The two side lumens (recording ports) are 2mm apart.

The catheter is attached to a pneumohydraulic capillary perfusion system and to two separate, external pressure transducers. The transducers are connected to a computer which generates a continuous graph of sphincter of Oddi pressure (mm Hg) versus time (seconds).

An infusion pump uses compressed nitrogen gas to continuously perfuse the catheter with sterile distilled water. As sphincter contractions occlude the side recording ports on the catheter, the flow of the water is stopped. The resulting change in water pressure is translated by the transducers into an electrical signal that is amplified and recorded onto the computer screen.

PROCEDURE

Since this procedure is performed in conjunction with an ERCP the same considerations apply.

Patients are advised that post procedure they will be admitted overnight to the hospital for observation.

An informed consent is very important. The physician explains the procedure and the risks involved and verifies that the patient fully understands them.

It is explained to the patient that their co-operation is crucial in obtaining accurate results.

All drugs that relax (anticholinergics, nitrates, calcium channel blockers and glucagon) or stimulate (narcotics or cholinergic agents) the sphincter should be avoided for at least 8-12 hours prior to manometry and during the procedure.

Diazemuls and Demerol are given for conscious sedation. The benzodiazepines have been shown to have no effect on sphincter pressure. Demerol, at a dose of < 1 mg/kg does not affect the basal sphincter pressure (although it does increase the phasic wave frequency). If glucagon must be used to achieve cannulation, an 8 to 10 minute waiting period is required to restore the sphincter to its basal condition.

A zero duodenal baseline is obtained before cannulation of the papilla.

The papilla is cannulated with a triple lumen manometry catheter, which is passed through the sphincter of Oddi into either the common bile duct or the pancreatic duct. In sonic instances, the duct is cannulated with either a cannula or papillotome and an exchange for the manometry catheter is done over an .018 guidewire.

Baseline ductal pressures are recorded. The catheter is then withdrawn at 1mm intervals while continuous pressure measurements are being taken. This has been termed the station pull-through technique. Usually 2 pull throughs are done.

Ideally both the bile and pancreatic ducts should be studied. Continuous aspiration of intraductal juice is done during manometry of the pancreatic duct using the aspiration/guidewire lumen of the manometry catheter.

COMPLICATIONS

Patients who have an endoscopic sphincterotomy for sphincter of Oddi dysfunction have complication rates two to three times higher than patients who have had an endoscopic sphincterotomy for ductal stones.

Pancreatitis is the most common complication occurring in up to 10-25% of patients.

ACKNOWLEDGEMENT

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REFERENCES

1. Champion, Malcolm C. and Orr, William C.; editors *Evolving Concepts in Gastrointestinal Motility*, Blackwell Science Ltd 1996: 316-320
2. Chuttani, Ram and Carr-Locke, David L.; *Pathophysiology of the Sphincter of Oddi*, Surgical Clinics of North America, Vol 73, No 6 December 1993
3. Lehman, Glen A. and Sherman, Stuart; *Sphincter of Oddi Dysfunction*, In: Yamada T, Alpers DH, Laine L, Owyang C, Powell DW, editors. *Textbook of Gastroenterology* 3rd Ed. Philadelphia: Lippincott, Williams & Wilkins, 1999: 2343-2354
4. Toouli, James and Craig, Alexander; *Sphincter of Oddi function and dysfunction*, Can J Gastroenterology, Vol 14, No 5, May 2000
5. *Society of Gastroenterology Nurses and Associates, Procedure Manual*, Williams & Wilkins, 3rd edition 1994: 173-176
6. *Gastroenterology Nursing, A Core Curriculum*, Mosby Inc., 2nd Edition 1998: 253-254

AIR CANADA

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What's New In G.I.?

Submitted by: Patsy Gosse, L.P.N. and Joan Rumsey, R.N.

In June of 2000 a new technological advance was introduced. A camera in a capsule, the newest breakthrough in endoscopy, was about to hit the market. Finally there is an easy way to visualize the small bowel. Scientists with an Israeli based company called *Given Imaging* have developed a device which consists of a camera, light source, radio transmitter and batteries. All are sealed within a capsule slightly more than 2.5 cm long and less than 1.25 cm in width. When swallowed the capsule can view the digestive tract and transmit pictures along the way. The camera takes several images per second which are picked up by flexible antennae and a receiver that is the size of a personal stereo. The images are stored in memory chips and then downloaded to a computer for viewing. The receiver is attached to an ambulatory belt which allows the users to go about their daily activities during the G.I. exam. The battery in the camera lasts about six hours. This allows enough time for the capsule to make its way through the small intestine. The capsule is propelled along by peristalsis and is able to transmit video images from pylorus to cocum, reaching the first part of the large intestine in less than two hours. The pill is naturally excreted.

Data presented and published to date includes results from animal testing and ten human volunteers. *Given Imaging* started clinical testing of the capsule in September 2000. Clinical trials were also started in New York, headed by Blair Lewis, M.D., Associate Clinical Professor at Mount Sinai School of Medicine. The trials will evaluate the capsule on patients with suspected bowel disorders. Trial results will be submitted to the U.S. Food and Drug Administration. Similar trials have taken place in the U.K. and Israel.

Physicians will determine if the wireless capsule technology can detect

pathology of the small bowel. Current technology only permits direct visualization of approximately the first 1/3 of the small bowel. The pill is especially designed to examine the small intestine. The capsule could replace enteroscopy which can be quite time consuming and uncomfortable for the patient. The patient is attached to an endoscope for hours at a time with current enteroscopic techniques. This capsule is not meant to replace current endoscopic practice for examining the esophagus, stomach, proximal duodenum and colon. It cannot do biopsies, cauterizations or other procedures that an endoscope can. The capsule cannot be stopped or steered to collect close up details of the small intestine's ailments. For now, use of this device is contraindicated on those with suspected bowel obstruction, patients who have had major abdominal surgery, pregnant women and patients with pacemakers or diabetes.

This capsule will be able to achieve painless endoscopic imaging of the entire small bowel. The system is designed as an adjunctive tool in the diagnosis of diseases of the small intestine. For the future, the view is looking good for the small bowel.

BIBLIOGRAPHY

- Retrieved from Ananova on May 2, 2001, "Video Pill to be Tested on Patients", http://www.arianova.com/news/story/sm_50116.htm/
- Associated Press, Aug. 30, 2000, Retrieved from Wired News Web on April 25, 2001, "Video Pill Probes Intestines", [wysiwyg://116/http://www.yc...news/business/0,1367,38515,00.html](http://www.yc...news/business/0,1367,38515,00.html)
- Retrieved from Billingsgazette.com (Aug. 31, 2000), "Tiny 'pill' camera takes gut pictures", <http://www.billingsgazette.com/health/2000083/hlpill.html>
- Canadian Healthcare Technology, "Wireless capsule endoscopy tested as diagnostic tool for bowel disorders", Retrieved April 27, 2001

Detroit News (Aug. 31, 2000), "Video pill captures human body's insides", <http://detnews.com/2000/technology/008/31/a09-113473.htm>

Korea Times, Sept. 9, 2000, Retrieved from hankooki.com - May 2, 2001, "Israelis ready to test video pill", [wysiwyg://50/http://hk.co.kr/kt_plaza/200009/200009091453384A1199.htm](http://hk.co.kr/kt_plaza/200009/200009091453384A1199.htm)

New York Times (May 30, 2000), National Science/Health, "Camera in a pill views digestive tract", http://www.lib.rpi.edu/dept/News Comm/Renns_news/NTYsiegel.html

The Online Future Magazine (Oct, 16, 2000), "Swallowable Capsule Pinpoints Digestive Disorders", <http://www.infinitypoint.com/Articles/New/971710882>, Retrieved May 1, 2001

Science News - Aug. 31, 2000, Retrieved from Cosmiverse on-line, May 2, 2001, "Testing to Begin of New Video Pill", <http://www.cosmiverse.com/science083104.html>

USA Today - Tech Reviews - Aug. 30, 2000, "Video pill to be tested on humans", [wysiwyg://45http://www.USAtoday.com/life/cyber/tech/review/crh462.htm](http://www.USAtoday.com/life/cyber/tech/review/crh462.htm), Retrieved May 1, 2001

Virtual Medical Worlds - June 9, 2000, "Swallowable Camera - Capsule to Visualize Gastrointestinal Tract from Patient's Interior", <http://www.hoise.com/vmw/oo/articles/vmw/LV-VM-08-00-25.html>, Retrieved April 25, 2001

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Marlene Scrivens
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Regina, Sask.

S4T 1A5
Phone 306 766 2441
Fax 306 766 2513

E mail:
scrivens@sk.sympatico.ca

Note: Receipt will be issued by the treasurer.

PRESIDENT'S REPORT

CERTIFICATION:

GREAT NEWS!!!! SPECIALTY DESIGNATION IS FINALLY HERE!!!!

Gastroenterology Nursing has been designated by the CNA Advisory Committee on Certification as a "SPECIALTY FOR THE PURPOSE OF CNA CERTIFICATION". This completes Phase I.

Congratulations to Cheryl MacKinnon, our Project Coordinator and Michele Paquette, our Certification Chair, for a job well done.

PHASE 2, EXAM DEVELOPMENT: Exam development requires special consideration given the small number of nurses working in the Specialty. CNA and the CSGNA met in March to discuss the potential options available and the timeframe for the development of a certification exam. Several options were discussed and will be further explored over the next several months. Our TARGET date remains 2002.

BOARD OF DIRECTORS: The Board has been busy over the past several months reviewing all the CSGNA Position Statements and Guidelines for Practice as well as developing new Position Statements on "Single Use Items" and "Reuse of Reusables".

Our first Gastroenterology Nurses Day was celebrated on May 11th and from all reports was a very great success. We will use feedback from our members to plan our celebrations for 2002.

On behalf of all the members of CSGNA, I sent the Proclamation and information on Colorectal Cancer Screening and the need for Canadian Citizens to have access to a Screening Program, to All Provincial Ministers of Health, the Federal Minister of Health, the Prime Minister, Leader of the Opposition, the Federal Health Critic, all Provincial Nursing Associations, the CMA, CAG, and the Cancer Society.

To date, I am pleased to report, I have received replies from the Saskatchewan Minister of Health and the

Ontario Minister of Health.

The CSGNA Website has been updated and expanded to provide more information to our visitors. Updates on Certification will be posted as the exam development progresses.

Lorie McGeough and I attended the SGNA Conference in Tampa. Unfortunately, due to FOG in this Beautiful Province, my flights were cancelled for three days and I missed the Business Meetings. The Conference was excellent and provided a great opportunity to network with many nursing colleagues.

EDMONTON CONFERENCE: The Edmonton Chapter of CSGNA is very busy preparing for the 2001 CSGNA Annual Conference. Please make every effort to attend. It promises to be an Educational and Enjoyable Event. I hope to see many of you there.

Have a Safe and Happy Summer.

**Lorraine Miller Hamlyn
President, CSGNA**

DEAR COLLEAGUES

Please note the Financial Audit for the year 2000 in our annual report. All financial statements were submitted to our current Auditor from PricewaterhouseCoopers & LLP Chartered Accountants.

As we strive toward Certification, the majority of our funds are kept in Term Deposits to earn as much interest as possible. These Term Deposits are guaranteed with no risk to our funds. We keep a minimum in both our operational and education accounts to maximize our return. The Term Deposits flow back to the appropriate account as required.

The funds in our Operational account are from our membership dues, national conference registration, exhibitor booths, and support from our generous sponsors.

The funds in our educational account are from the 25% profit each chapter submits post Educational Days, and Scholarships donated by our sponsors.

Any questions or concerns regarding YOUR money please contact me or any member of the Executive.

**Sincerely,
Edna Lang
National Treasurer, CSGNA**

DEAR COLLEAGUES

It's time again to renew your annual membership for the 2001-2002 year. Our renewal date will continue to be the month of June. Membership continues to fluctuate, depending on where our National Conference is being held. With our National Conference in Alberta this year, the new memberships & renewals are up in Alberta, British Columbia & Saskatchewan. Please encourage your friends and colleagues to become members and maintain their membership, not only when the conference is coming to their area, but to help out with their local Chapters. As we all are aware of the reorganizing in our health care system today, the benefits of being a member are: on going networking with colleagues from across the country, keeping abreast of current research and technology, position statements and guidelines, scholarships, CSGNA website and our goal of certification. Please fill out membership application forms when you renew and send any changes of name or address to the address below.

During a recent executive meeting, a motion was passed that all past presidents would be given a lifetime membership. To maintain your membership please fill out the membership form & return it to the membership chair each year to keep your information current. If I have missed anyone please inform me when you renew.

Please direct your membership application to:
Edna Lang
CSGNA Treasurer/Membership Chair
27 Nicholson Dr., Lakeside NS
B3T1B3

**Sincerely,
Edna Lang**

I would like to welcome the following new members:

Catherine Armour	Cobble Hill, BC
Suzanne Stothers	Vancouver, BC
Lorna Murphy	North Vancouver, BC
Donna Taker	Yellowknife, NT
Peggy Bienvenu	Edmonton, AB
Eileen Bryksa	Lethbridge, AB
Irene Irvine	Calgary, AB
Colleen McNeil	Calgary, AB
Rachel Pascoe	Calgary, AB
Beverly Waldorf	St. Albert, AB
Pamela Blakely	St. Albert, AB
Shirley Tuinenga	Redmeadows, AB
Eva Berga	Calgary, AB
Monique Bouchet-Bert	Calgary, AB
Vicki Braidberg	Calgary, AB
Crystal Edgar	Chestermere, AB
Karin Friedenberger	Calgary, AB
Doris (DJ) Hacking	Medicine Hat, AB
Joan Heatherington	Calgary, AB
Pauline Gillis	Calgary, AB
Yvonne Ibbotson	Medicine Hat, AB
Chris Larson	Calgary, AB
Jemma Lynch	Calgary, AB
Linda Makar	Calgary, AB
Donna Martin	Medicine Hat, AB
Sheryl Myden	Calgary, AB
Corrine O'Brien	Calgary, AB
Helen Paget	Calgary, AB
Doreen Portas	St. Albert, AB
Nancy Steinkey	Medicine Hat, AB
Marg Stewart	Medicine Hat, AB
Gwen Wall	Calgary, AB
Kathy Whitman	Lethbridge, AB
Jeanine Bernard	Winnipeg, MB
Julia Beckstead	Mallorytown, ON
Louis Konstant	Don Mills, ON
Iris Corrigan	Toronto, ON
Margaret Fisher	Stayner, ON
Rosemary Johnson	Aurora, ON
Tracy Kent Hillis	Harrowsmith, ON
Shahnaz Gborbani	North York, ON
Lorinda Melicor	Scarborough, ON
Jenefer Pardy	Barrie, ON
Linda Page	Fleshertan, ON
Lisetta Seddon	Toronto, ON
Kimberly Todd	Markham, ON
Berenice Vorne	Acton, ON
Phil Kenny	Mississauga, ON
Cathy Bidwell	Burlington, ON
Kristine Bruce	Acton, ON
Sandra Killingbeck	Acton, ON
Ginette MacLeod	Timmins, ON
Lorraine Majcen	Scarborough, ON

ANNUAL REPORT FOR PRESIDENT-ELECT

I would like to take this opportunity to thank the Bylaws Committee members (Lorraine, Elaine, Judy, Evelyn Mc., Sandy) for their input and work on the revision of the CSGNA Bylaws. At this time it is essential for each member to take the opportunity to read through the Bylaws and familiarize themselves with each one. Please exercise your right to vote on the revisions and submit your vote before the end of July. The majority of revisions are simple and easy reads. We welcome any input from members on the content of each bylaw.

Direction of the CSGNA is of the utmost importance. Setting goals, working towards them and successfully achieving them has been a focus for several years. I am proud to be part of a volunteer group that works as diligently as they do. It is commendable the amount of time and effort that is put forward from a vast way of nurses across this country. During my participatory time I have witnessed the use and recognition of the CSGNA as a national and international respected group. As members we should be proud of our achievements. I would like to thank all of the executive members from the past and present for their commitment. I would also like to thank their families, for without their support none of this would have been possible.

Joining the CSGNA Executive continues to be a wonderful learning and growing experience. The development of new expertise and new friendships will always remain invaluable. It is important to have new Executive members in order to maintain and retain new and improved ways of doing things. We are only too happy to discuss any Executive position any member may be considering undertaking. Please come forward, join us you will not be disappointed.

We are looking forward to the Edmonton Conference and once again being together.

Take care and best wishes for the upcoming year.

Lorie McGeough

OTTAWA CHAPTER REPORT CSGNA

The Ottawa Chapter is busy planning a fall education event. Several suggestions have been put forward and are being looked at. We are also working on our poster for Edmonton and encourage others to do so. I would like to take this opportunity to thank you for your support during my four year tenure as Director of Canada Centre. It was a very educational and fun experience. I met many wonderful people along the way. I also learned a lot not only about GI, but about CSGNA and what hard working and dedicated individuals come forward to serve on the executive. Have a nice summer. See you in Edmonton.

**Yours in CSGNA,
Nancy Campbell
Director of Canada Centre**

CANADA CENTRE REPORT

The **Golden Horseshoe Chapter** is planning an education session for the fall. Details will be available on the web site later. The current Chapter President Cindy James is looking for members who are interested in becoming part of the Golden Horseshoe Chapter Executive. This is a great opportunity to learn and network with members across the country. If you are interested, please speak with Cindy James. I am sure she will be delighted to hear from you.

The **Southwestern Ontario Chapter** had an education session on March 22, 2001 on Gastroesophageal Reflux Management presented by Dr. Peer. It was a very informative evening. Thanks to Abbott for sponsoring the evening.

The **London and Area Chapter** had an education session on April 17, 2001 on Endoscopic Ultrasound presented by Dr David Lloyd. Thanks to Abbott Laboratories for sponsoring the evening.

The **Greater Toronto Chapter** had an education session on May 2, 2001 on "Burn, Inject, Loop, Clip – Tools of the Trade in Managing GI Bleeding" presented by Dr. L. Cohen. Thanks to Byk Canada for sponsoring the evening.

Hoping to see many of you in Edmonton.

**Yours in the CSGNA,
Sandy Saioud**

CANADA WEST REPORT VANCOUVER ISLAND

Chapter president Irene Ohly reports that monthly inservices are being held at both hospital sites.

Chapter members attended a presentation "Metal Stents in the G.I. Tract" given by Dr. Richard Kozarek, Chief of Gastroenterology, Virginia Mason Medical Centre and Clinical Professor of Medicine, University of Washington, Seattle, Washington.

Both G.I. Units in Victoria celebrated G.I. Nurses day with coffee and cake which was decorated with "Happy first annual GI Nurses Day".

Four members of the chapter are planning to attend the national conference in Edmonton.

VANCOUVER REGIONAL

Gail Whitley reports that there has not been much activity since their educational workshop in November. A chapter meeting and educational session is planned for the 3rd or 4th week in June.

The chapter is planning another educational workshop this late fall. They hope to raise funds to assist members in attending the 2002 national conference in Newfoundland.

OKANAGAN

Linda Frandsen is back from South America and has resumed her role as chapter president. She had a great time

travelling in South America. While there, she visited with Luisa Fanes in Curitiba, Brasil. Luisa was one of the nurses who received the Gastro '99 nursing scholarship. After attending Gastro '99, she spent 9 days in Kelowna with Linda as her preceptor. Luisa gave Linda a tour of her hospital and G.I. Unit and took her and her husband to many lovely places in Curitiba.

A chapter meeting was held on Monday, May 14. After business was discussed, they spent time practicing with the rotatable clipfixing device.

For their treat for G.I. Nurses Day, they each shared photos and stories of their winter trips while sipping South American wines and nibbling goodies. They were able to hear about Hawaii, Aruba, Australia and South America.

Several members are interested in attending the national conference in Edmonton. They are checking with their manager and doctors to see how many can be away at once. An educational workshop is planned for next spring.

SASKATCHEWAN

The Saskatchewan chapter bids a fond farewell to their past president, Elaine Fehr, who has left G.I. nursing to pursue a career in Ambulatory Care.

They welcome Shirley Malach as their new chapter president. Shirley is a 20 plus year veteran of G.I. nursing and is currently employed in the Endoscopy Unit at the Regina General Hospital.

To celebrate G.I. Nurses Day, information booths were set up outside the cafeteria in their two major hospitals, with the view of promoting our organization to fellow health care worker, as well as the general public. Viewers to the booths received give-aways in the form of a bran muffin recipe as well as a piece of cake. There was a quiz with common G.I. conditions and the

winner received a lovely gift basket. The G.I. Units treated their staff to a wonderful Greek luncheon. The day was well received by all.

Currently meetings are on going to organize this fall's G.I. Days for Nurses. They are into the final planning stages and hope once again for a large attendance.

**Respectfully submitted by
Evelyn Hilderman
Director, Canada West**

DEAR CSGNA COLLEAGUES,

This my first year on the executive as your Newsletter editor.

I wish to thank Lorie Mcgeough for the outstanding work she has done with the Newsletter over the many years she was our editor. Her effort has made it easier for me to relieve her of her duties, so she could pursue other interests.

I see the Newsletter as a great means of communication, and a medium for sharing ideas with our GI colleagues across the country. I encourage and value your input for us to make it just that.

I thank those of you who have submitted articles, and I look forward to your comments, and or ideas that would enhance our present format.

As you know our present sponsor to the Newsletter is Carsen. I thank them for their continued support to our group.

I am pleased to be a part of this dedicated group of GI nurses who presently make up this executive, and I thank them for their assistance and support to make my passage into this position easier.

I look forward to hearing from you.

**Your editor,
Kay Rhodes**

MINI QUIZ ANSWERS

1. c 2. c 3. d 4. b

Team spirit evolves over time.

SYNOPSIS CSGNA NATIONAL EXECUTIVE MEETING MARCH 16 - 18, 2001, TORONTO

Activity Reports: Newsletter deadlines are June 15, October 15, and February 15. Our website now had three sections for education. National, Regional, and Local. Infection control bibliography was updated and presented to all. Position statement was revised and will be published in the Guiding Light. It will be available at the conference.

Committee report: Vacancies for Executive positions in September are Directors Canada east, centre and west.

All members attending Edmonton conference are encouraged to use Air Canada, so the organization will be eligible for complimentary hospitality class tickets.

The following information will be required:

Name: Annual Conference 2001.
Travel date: September 28-30, 2001

Event City: Edmonton. Personalized Event #CV150675

Organization: CSGNA/Edmonton Chapter. This is also posted on our website.

A motion was passed for the first free ticket from Air Canada promotion for our conference will go to the planning committee. Any subsequent tickets will be given to the National Executive for future meeting and conferences.

Director pins were given to the Executives so that they can be worn at the Annual Conference.

Changes to the Bylaws included numbers, consistent titles, language used, and new Committees were all addressed. Members will receive these changes for voting.

Vendor Relations Committee was formed, consists of Treasurer, Directors one east and one west. Finance Committee was formed, consists of Treasurer, Directors one east and one west

Business Arising: Certification: CNA reviewed and approved the CSGNA certification proposal. The CBGNA are not willing at this time to enter into an agreement to sell any portion of their exam. Societal Status sent to Lawyer for final approval. Conference evaluation, overall good feedback.

Strategic Plan: May 11, 2001 is Proclaimed National Gastroenterology Nurses Day. Conference planning document is being compiled, as a guide for future conference. Mentoring Chapter Executives. For Edmonton Chapter Executive meeting preparing and presenting "cocoon to butterfly." Teleconference June 11, 8 p.m. est.

**Respectfully submitted,
Elaine Binger**



Your executive hard at work.



Your 2001 executive after a weekend of great accomplishments.

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**What you do today is important because you are exchanging
a day of your life for time ... Let it be something good.**

POSITION STATEMENT

RESPONSIBILITIES OF THE REGISTERED NURSE RELATED TO CONSCIOUS SEDATION

Conscious sedation provides a minimally reduced level of consciousness in which the patient retains the ability to independently and continuously maintain an airway and respond to physical stimulation and verbal command.

The primary role of the Registered Nurse during Endoscopy procedure is the maintenance of patient safety. Conscious sedation is commonly used during diagnostic and therapeutic endoscopic procedures. The safe administration and maintenance of conscious sedation is one of the most important responsibilities of the Registered Nurse in the Endoscopy setting. Care of the patient undergoing a diagnostic or therapeutic endoscopic procedure continues to be more critical in nature, more complex in technology and more comprehensive on scope. Nursing care of the patient has changed to include a continuous comprehensive nursing assessment, administration and maintenance of continuous sedation in the presence of a physician, administration of reversal agent, utilization of equipment during the endoscopic procedures, and comprehensive documentation.

The Canadian Society of Gastroenterology and Associates supports the position that registered nurses trained and experienced in Gastroenterology nursing and endoscopy may be given the responsibility of administration and maintenance of conscious sedation in the presence of and the order of a physician. In addition, the Registered Nurse may be given the responsibility for the administration of reversal agents prescribed by the physician. The Registered Nurse had education and experience in Endoscopy, knowledge of medications used and skills to

intervene in the event of complications. Whether or not the Registered Nurse is responsible for assessing and monitoring the sedative/analgesic, the Registered Nurse is responsible for assessing and monitoring the patient throughout the procedure and post procedure phase of the patient's care.

A second Registered Nurse may be required to assist during procedures involving complex technical demands or in the procedures that are complicated due to the severity of the patient's illness.

Automatic monitoring devices will enhance the ability of the Registered Nurse to accurately assess the patient but are no substitute for the watchful, educated assessment by the Registered Nurse.

The Registered Nurse is accountable for the responsibilities he/she accepts. The Registered Nurse functions within the limitation of the institutional policies and the provincial governing bodies.

GUIDELINES FOR THE CARE OF PATIENTS RECEIVING CONSCIOUS SEDATION

NOTE:

THIS STANDARD SHOULD BE CONSIDERED IN COMBINATION WITH THE PROCEDURE SPECIFIC PRACTICAL GUIDELINES

PRE PROCEDURE:

The R.N. will ...

1. Complete the nursing history and assessment form, particularly noting prior response to:
IV Sedation (Valium, Demerol, Fentanyl, Versed, etc.)

Use of narcotics, benzodiazepines or other analgesic of "social" drugs.

2. Inform the patient of restrictions related to driving or using equipment requiring clear judgements or quick physical responses. It is advised not to drive for 24 hours post sedation.
3. Advise patients against ingesting alcohol for 24 hours post sedation.
4. Assure patient has made appropriate discharge transportation arrangements.
5. Document findings and inform physician of significant findings.

INTRA PROCEDURE:

The R.N. will ...

1. Document medications received by the patient.
2. Provide and document minimal monitoring of all patients including: BP, pulse, respirations, level of consciousness, temperature and dryness of skin and pain tolerance at the initiation, during and at the completion of the procedure. As indicated by the patient response, assessment may be more frequent.
3. Monitor O₂ saturation and heart rate as determined by continuous pulse oximetry. Document significant changes in O₂ saturation, heart rate, and interventions taken and patient responses.
4. Ensure the immediate availability of Emergency Equipment, eg. Oxygen, oral airway, ambu bag, medication to reverse the effects of narcotics and benzodiazepines.

POST PROCEDURE:

The R.N. will ...

1. Assess BP, heart rate, respiratory depth and effort and level of consciousness on admission to Recovery Area, after 15 minutes and at discharge. Post procedure oximetry may be performed until the patient's respiratory status is stable or returned to pre-procedure state.
2. Assess and document unexpected events and post procedure complications related to sedation.
3. Assist and accompany patient to the bathroom, assess presence of orthostatic hypotension.
4. Assess gait prior to discharge.
5. Remove IV access (if present) prior to discharge, assess site and document.
6. Reinforce pre procedure teaching regarding driving, equipment operation and making decisions requiring judgement. The teaching provided should be in written form and a copy given to the patient prior to discharge.

NOTE:

Patients requiring ongoing pulse oximetry or those experiencing altered levels of consciousness related to sedation will not be left unattended in the recovery area.

The Registered Nurse functions within the limitations of the provincial licensing body and institutional policies.

REFERENCE LIST

- American Society of Post Anaesthetic Care Nurses (1991). Position Statement on the role of the Registered Nurse in the management of the patient receiving conscious sedation.
- Bailey, R. (1996). Consensus in Endoscopy. Canadian Journal of Gastroenterology. July 10 (4) 237-242.
- Bell, G., McCloy, R., Charlton, J. Campbell, D., Dent, N., Gear, M., Logan, R., Swan, C. (1991) Recommendations for standards of sedation and patient monitoring during Gastrointestinal Endoscopy. GUT 7(32)823-827.
- Kidwell, J. (1991). Nursing care of the patient receiving conscious sedation during gastrointestinal procedures. Gastroenterology Nursing 13(3) 134-139.
- McCloy, R., Fleisher, D. (1993). Sedation and monitoring for gastrointestinal endoscopy. UK Colloquium Internation, Ltd.
- Society of Gastroenterology Nurses and Associates Inc. (1991). Position Statement: Responsibilities of the Gastroenterology Registered Nurse related to Conscious Sedation.
- Somerson, S., Husted, C., Sicilia, M. (1995). Insights into Conscious Sedation. American journal of Nursing. June. 26 - 32
- Wansbrough, G. (1996). Quality Assurance Medication Administration Standards. The College of Nursing of Ontario College Communiqué. November 21 (5) 4-31.
- Bailey, R., (Chairman) (1996). Consensus in Endoscopy. Canadian Journal of Gastroenterology. July 10 (4).
- Bell, G., McCloy, R., Charlton, J., Campbell, D., Dent, N., Gear, M., Logan, R., Swan, C. (1991). Recommendations for standards of sedation and patient monitoring during Gastrointestinal Endoscopy. GUT 7 (32) 823-827
- Kidwell, J., (1991). Nursing care of the patient receiving conscious sedation during gastrointestinal procedures. Gastroenterology Nursing 13(3) 134-139.
- McCloy, R., Fleisher, D. (1993). Sedation and monitoring for gastrointestinal endoscopy. UK Colloquium Internation, Ltd.
- Marley, R.A., Moline, B.M. (1996). Discharge from the Ambulatory Setting. Journal of Post Anaesthesia Nursing. 11 (1) 39-49.
- Meeker, M.H., & Rothrock, J.C. (1999) Alexanders Care of the Patient in Surgery (11th edition) Toronto: Mosby Yearbook, 208-209 & 1194.
- Odom, J., (1997). Conscious Sedation in the Ambulatory setting. Critical Care Nursing Clinics of North America. 9 (3) 361-368.
- Tupper, D., (1999). Presentation and Discussion regarding Decision to Discharge post Procedure at QE11 Health Sciences Centre. November 17, 1999. Douglas Tupper, LLB of Palmer, Paterson, Hunt, Murphy. Halifax, Nova Scotia.
- QE11 Health Sciences Centre, Perioperative Nursing Policy (1998). Discharge of Patient: Same Day Surgery Unit (SDSU). Halifax, Nova Scotia.
- Dunsworth, B.A., Hoffman, L.A., Messinger, J.A., O'Donnell, J.M. (1999). Getting Conscious Sedation Right. American Journal of Nursing 99 (12) 44-50.
- Jagim, M. (2000) Conscious Sedation. Journal of Emergency Nursing. 23 (3). 251-259.



Keen or what?!

**SCHOLARSHIPS
STANDARDS
SPEAKERS BUREAU
POSITION STATEMENTS
TOPICS
POSTERS
GUIDELINES
CEU'S
EVALUATIONS**

CSGNA Education Corner

Announcements from the Education Committee

- CAG/CSGNA Scholarship applications in this and every issue.
- Criteria for scholarships in this issue.
- Orientation package for GI units being developed.
- Check out the HepNet website www.hepnet.com.

Education Committee Members:
Lorie McGeough, Dianne Ryan,
Evelyn Hilderman,
Lorraine Miller-Hamlyn,
Nancy Campbell, Linda Feltham,
Marlene Scrivens, Education Chair
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POSITION STATEMENT

REUSE OF SINGLE-USE MEDICAL DEVICES

In the absence of clear regulatory guidelines for reuse of single-use medical devices, based on current scientifically-based literature, and taking into consideration concerns for patient safety and ethical practice, The Canadian Society of Gastroenterology Nurses and Associates, support the position that critical medical devices labeled for single-use should **NOT** be reused.

REUSE OF SINGLE-USE MEDICAL DEVICES DEFINITIONS:

Reuse refers to the cleaning, packaging and sterilization of a single-use medical device used on a patient for the intended purpose of using it on another patient.

Critical devices are those which break the mucus membrane, coming into contact with sterile tissue or the vascular system.

BACKGROUND:

This statement is intended to address the controversy surrounding the issue of the reuse of critical medical devices packaged and labeled for single-use. Cost containment concerns have led some healthcare facilities to consider reuse of single-use critical medical devices. Manufacturers are required to conduct very stringent testing for reusable products. They must meet FDA criteria to validate that a device can be cleaned and, if necessary, resterilized in order for it to be labeled "reusable". These same stringent tests are not required for items intended

for single-use. Based on the result of these required tests, the manufacturers have defined recommended usage on package labels. The topic of reuse raises concerns about the ability to clean single-use critical devices, how well a device holds up after sterilization, and how many times a device can be reused while maintaining patient safety and mechanical effectiveness. Many devices, whether labeled as single-use or reusable, appear identical on visual inspection. However, manufacturers may for a number of reasons change the material used in production. Changes in materials may not be obvious on visual inspection, but unless the device is labeled reuse, the new materials may not be able to withstand the heat of chemicals required for sterilization.

DISCLAIMER:

The Canadian Society of Gastroenterology Nurses and Associates assumes no responsibility for the practices or recommendations of any member or other practitioner, or for the policies or procedures of any practice setting. Nurses and associates function within the limitations of licensure, delegated medical acts, and/or institutional policy.

BIBLIOGRAPHY

Society of Gastroenterology Nurses and Associates, Inc. (1998). Position Statement on Reuse of Single-Use Medical Devices.

Martin, A.M., Reichelder, M., "APIC GUIDELINES FOR INFECTION CONTROL PRACTICE: APIC guideline for infection prevention and control in flexible endoscopy", *AJIC AM J Infect Control* 1994; 22:19-38.

Michele, T., Cronin, W., Graham, N., Dwyer, D., Spiesope, D., Harrington, S., Chaisson, R., Bishai, N. "Transmission of Mycobacterium tuberculosis by a fiberoptic bronchoscope" *JAMA* 1997: 1093-1095.

Muscarella, L., "High-level disinfection or sterilization of endoscopes" *Infection Control and Hospital Epidemiology*. March 1996; 17: 183-187.

Olympus Evis 100 & 130 Cleaning and Disinfection Video 1997.

Olympus Evis 140 Reprocessing Video 1998.

Rutala, W.A., "APIC Guideline for selection and use of Disinfectants." *American Journal of Infection Control*, vol. 18, no.2 (April 1990), 99-117.

Rutala, N., "FDA Labeling Requirements for Disinfection of Endoscopes: A Counterpoint" *Infection Control and Hospital Epidemiology* 1995. 1995; 16(4) 231-235.

Society of Gastroenterology Nurses and Assistants. *Recommended Guidelines for Infection Control* (2nd Ed.) Rochester, NY: 1992.

SANG Endoscopic Cleaning Video 1997.

Vesley, D., Norlien, K., Nelson, B., OH, B., Streifel, A. "Significant factors in the disinfection and sterilization of flexible endoscopes" *American Journal of Infection Control*. 1992: 291-299. Advanced Sterilization Products (1999) Cidex opa solution material safety data sheet 015, revision.

SGNA Guidelines for the use of High Level Disinfectants and Sterilants for Reprocessing of Flexible Gastrointestinal Endoscopies Feb 2000.

SGNA Standards of Infection Control in Reprocessing of Flexible Gastrointestinal Endoscopies Feb 2000.

Decontamination of Reusable Medical Devices CSA International 2314:8-00 March 2000.

Advanced Sterilization Products (1999) Cidex OPA Solution Material Safety Data Sheet (015) revision C.

CSGNA

USE OF REUSABLE MEDICAL DEVICES

RECOMMENDED GUIDELINES IN ENDOSCOPY SETTINGS

PREFACE

These guidelines were developed by the Canadian Society of Gastroenterology Nurses and Associates in 2001.

DISCLAIMER

These guidelines are based on current understanding and practice in the field of gastroenterology. Each institution is responsible for establishing policies and procedures for that particular endoscopy setting.

The Canadian Society of Gastroenterology Nurses and Associates assumes no responsibility for the practices and recommendations of any member, other practitioner and for the policies and practices of any endoscopy unit.

INTRODUCTION

Attention must be given to the reuse of medical devices. Contaminated and unsafe medical devices pose a potential source for cross-contamination, infection and injury to patients and personnel. Strict guidelines are needed to standardize the process of reusing medical devices. The guidelines are intended to assist institutions and endoscopy units in the development of their specific needs. Providing the best possible care is the ultimate mission of each healthcare institution and the professionals who staff it. An integral component of delivering quality care is instrumentation. Most Endoscopy procedures are performed on an outpatient basis. The volume of procedures scheduled each day is often high. Whether that schedule can be met and each patient given high quality care is dependent on device reliability and safety.

TERMINOLOGY

Reuse – The process by which a reusable device that has come into contact with a patient is cleaned, decontaminated, reconditioned/refurbished, and disinfected or sterilized prior to subsequent use on the same or another patient.

Reprocessing – The process by which a pack, which is opened but unused, is repackaged and sterilized.

Resterilization – The further processing of a product (which was sterile and unopened) due to a passing expiry date or for its inclusion into larger pack.

Non-critical Device – Any device that comes in contact with intact skin e.g. blood pressure cuff.

Semi-critical Device – Any device which comes in contact with mucus membrane. e.g. endoscope.

Critical Device – Any device which comes in contact with sterile areas of the body or the vascular system. e.g. biopsy forceps and sphincterotomes

BACKGROUND

The reuse of critical and semi-critical devices has become a common practice in many institutions. The reuse of medical devices is a practice undertaken primarily for economic reasons as a means to maximize the effective usage of a particular nondisposable device. It is estimated that 41% of Canadian hospitals reuse medical devices of some kind. Only the devices labeled reusable can be reused.

Due to this concern the CSGNA decided to establish some guidelines and recommendation for reuse of reusable medical devices.

PURPOSE

To develop a guide to assist endoscopy nurses to make informed decision on the use of reusable medical devices.

RECOMMENDATIONS FOR REUSE

All reusable medical devices must be placed into three categories:

1. Critical
2. Semi-Critical
3. Non-Critical

The process for reuse, resterilizing and reprocessing is determined by the category in which the medical device is classified.

Reprocessing of reusable endoscopic devices include the following steps:

- Transport to the reprocessing area
- Soaking
- Brush cleaning
- Rinsing
- Ultrasonic cleaning
- Inspection
- Drying
- Lubrication
- Packaging
- Sterilization according to Manufacturers Recommendation
- Transport back to the endoscopy suite
- Inspection
- Prepare for use

(Refer to CSGNA Infection Control: Recommended Guidelines in Endoscopy Setting)

Reusable Device Reprocessing and Validation of Performance

- Requires thorough policy and procedure program
- Requires assignment of responsibility to highly qualified individuals

- Must ensure integrity of the device

Issues to Consider to Meet Performance Standards

- Strict adherence to the Manufacturer's Instructions for Reprocessing
- Clinically Proven Device
- Inspect Upon Opening Package
- Necessity to Perform Multi-Step Cleaning Process and High Level Disinfection/Sterilization Process
- Ensure Adequate Backup Inventory
- Establish Protocol for Reprocessing
- Establish Protocol for Inspection and Repair
- Establish Training and Retraining Protocols for Staff
- Establish Institutional Policy/Standards to determine maximum number of use for the device

Preventing patient infection means that the device must be free of contamination. Preventing injury means that the device must function according to specifications without degradation of parts that might become dangerous to the patient or staff. Perhaps the most significant risk of injury from product degradation is the fraying of electrical sheaths due to reprocessing plus normal wear and tear during procedures. This is difficult to monitor even with close inspection. The potential of injury to both the patient and staff may be significant.

ISSUES IN REUSE

1. Risk of infection

- A) Thorough cleaning:** Thorough cleaning is the most integral part of reprocessing. Concern is expressed regarding mechanical parts being difficult to clean, and that porous material, such as plastic, may absorb contaminants and chemicals.
- B) Sterilization:** Most manufacturers recommend steam

sterilization. Gas is excellent in sterilizing provided the equipment is free from all blood and other organic materials. The item should be dry because the presence of saline or water may form a poisonous chemical in the presence of gas. With the elimination of chlorofluorocarbons (CFCs), which are required for most gas sterilizers, institutions are switching to other technologies. Check manufacturer's label for reprocessing.

- C) High Level Disinfection:** High level disinfection may be appropriate for semi-critical devices, but the effect on functionality must be assessed.
 - D) Risk to personnel:** Personnel performing the reprocessing of the item are at risk if being exposed to body fluids and/or cleaning, disinfection or sterilization products. Personnel must follow the Health and Safety guidelines for their institution. (See Recommendations in the CSGNA Infection Control Guidelines).
- 2. Medical Device Integrity**
It is necessary to assess what effect the high level disinfection or sterilization process will have on the integrity and functionality of the device. The number of reuses should be based on manufacturer guidelines.
 - 3. Cost-effectiveness**
Institutions should consider the following; cost of labour, supplies and machine use, storage, quality assurance programs, overhead, possible additional liability insurance and possible increase in price of an item if fewer are used. There are also protocol development costs and educational costs to consider.
 - 4. Legal Issues**
The manufacturer's labeled information on care and usage of reusable products must be adhered to.

When infections occur or injuries take place due to an instrument selected and maintained by the institution, there is a potential for significant legal liability. Instruments that are continually reprocessed can increase that risk.

Disposal of the instrument after its useful life must be performed according to institutional and governmental regulations.

Liability may be avoided or reduced if a reasonable standard of care can be demonstrated, including the adherence to established hospital guidelines on reuse.

5. Ethical Issues

Must the patient be informed that the instruments/devices being used for their procedure is a reusable device? Is this part of an informed consent? Usually, specific consent is not obtained from the patient. The risk of the procedure in general is described to the patient in the same manner whether it is a new or reusable device.

It has been suggested that internal procedures must be developed, approved by the Board of Directors, and that hospital policy must become public policy. The debate revolves around the social responsibility of stakeholders to society and to individuals.

SUMMARY

There is a high volume of endoscopic procedures performed in many institutions. For both the patient's safety and the financial health of the institution, it is important that these procedures be performed reliably, safely and efficiently.

Most of the devices used in endoscopic procedures are classified as critical or semi-critical. The threat of potentially life threatening malfunction can lead to patient/staff injury or needless prolongation of the procedure.

Reusable devices provide assured first-use performance. After that, a series of steps must be performed to en-

sure that they are properly reprocessed and provide acceptable performance during subsequent procedures.

It is important that each institution be fully aware of the issues involved in device selection. Institutions that choose to reuse devices need to validate the sterility and integrity of the reprocessed devices, and have in place detailed protocols to include mechanisms for ongoing evaluation and quality assurance monitoring.

BIBLIOGRAPHY

- SGNA Position Statement – Reuse of single-use Critical Medical Devices.
- Health Care Corporation of St. John's – Reuse of single-use Items.
- Medical Devices Canada – Industry Position Paper – The Reuse of Medical Devices.
- International Association of Healthcare Central Service Material Management – Position Statement Paper on The Reuse of Medical Devices.
- Canadian Healthcare Association – The Reuse of Single-Use Medical Devices: Guidelines for Healthcare Facilities.
- Michelle Alfa, “The Effectiveness of Hospital Sterilization”, *Infection Control Hospital Epidemic.*, 1996
- ECRI Special Report: Reuse of Medical Devices. Making Informed Decisions 1996

Favaro, M.S. and Bond, W., “Sterilization, Disinfection, and Antisepsis in the Hospital.” *Manual of Clinical Microbiology* (5th Ed.). Washington, DC: American Society for Microbiology, 1990.

Considerations: Endoscopic Device Selection – Performance, Safety and Cost – Making Informed Decisions – Microvasive Education Center, Boston Scientific Corporation.

Recommended Guidelines for Infection Control in Gastrointestinal Endoscopy Setting. SGNA Inc., SGNA Monograph Services. 1995.

Reichert M., Choice to Reuse Disposables Requires Factual Assessment. *OR Manager.* 1996; 12,6:8-9.

Decontamination of Reusable Medical Devices, 2314:8-00 Mach 2000.

POSITION STATEMENT

INFECTION CONTROL: RECOMMENDED GUIDELINES IN THE ENDOSCOPY SETTING

DISCLAIMER

These guidelines are based on current understanding and practice in the field of gastroenterology. Each institution is responsible for establishing policies and procedures for that particular endoscopy setting.

The Canadian Society of Gastroenterology Nurses and Associates assumes no responsibility for the practices or recommendations of any member or other practitioner or for the policies and practices of any endoscopy unit.

INTRODUCTION

Attention must be given to the implementation of infection control standards. Contaminated endoscopes and accessories are potential sources of infection for both patients and personnel. Strict guidelines are needed to standardize the cleaning/disinfecting/sterilization processes. These guidelines

are intended to assist institutions and endoscopy units in the development of policies for their specific needs.

TERMINOLOGY

Clean – Visibly free from debris

Endoscope - Flexible – Flexible fiberoptic or video endoscope used in the examination of the hollow viscera (i.e. colonoscope, gastroscope, duodenoscope, sigmoidoscope, bronchoscope).

High-Level Disinfectant – A liquid chemical germicide which is capable of destroying all microbial life including high numbers of bacterial endospores but is used under conditions where it achieves the destruction of all vegetative bacteria, viruses and fungi but not necessarily all bacterial endospores.

Patient-Ready Endoscope – An endoscope rendered clean after being subjected to a validated cleaning procedure subjected minimally to a high level disinfection process and rinsed so that it does not contain residual chemicals in amounts that can be harmful to humans.

Alcohol – 70% isopropyl or ethyl alcohol

Air – Airflow provided by a pump or compressor.

Detergent – Low-sudsing enzymatic formulations recommended by the manufacturer of the endoscope.

Water – Clean potable water or potable water that has been filtered by passage through a .2um filter of otherwise treated by a method documented to improve the microbiological quality of the water.

RECOMMENDATIONS FOR SAFETY OF PERSONNEL

Safety is of the utmost importance and should be in the forefront of each employee's mind. Consistent practice must be maintained to prevent the spread of disease and to protect from the dangers of the chemicals used in the cleaning and high level disinfection of endoscopes. Universal precautions must be practiced at all times.

- All personnel should be immunized against Hepatitis B.
- Health care workers who have respiratory problems (i.e. asthma) should be assessed by Occupational Health prior to working with chemical germicides.
- Eye protection and moisture resistant masks or face shields should be worn to prevent contact with splashes during the cleaning procedure and disinfection/sterilization process.
- Moisture resistant gowns should be worn to prevent contamination of personnel due to splashes of blood or other body fluids or injury due to chemical disinfectant/sterilant contact. The changing of gowns is recommended between procedures.
- Protective apparel (gown and mask) should be removed when leaving the procedure room and cleaning room.
- Gloves should be worn for handling and cleaning of dirty equipment as well as for any potential contact with blood or body fluids. Chemical resistant gloves (nitrile) are recommended when handling disinfectant solutions.
- All needles and sharps are to be appropriately disposed of in puncture resistant containers at their point of use. Do not recap needles.
- Fingernails should be kept short to prevent the puncturing of gloves. Jewelry should not be worn on the hands because it harbors microorganisms and may puncture gloves.

- Meticulous hand washing should be done between patient contact, after glove removal and when entering or leaving the Endoscopy area. If hands and other skin surfaces are contaminated with blood or body fluids, wash immediately.
- Health care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care and from handling patient care equipment until the condition resolves.

RECOMMENDATIONS FOR ENDOSCOPES

Refer to the manufacturer's instructions for cleaning and disinfecting each particular endoscope: Scrupulous cleaning and disinfection after each patient use must be completed to prevent the spread of infection. Only trained personnel will perform this procedure.

Inspection

At all stages of handling there should be inspection of the endoscope for damage.

Leakage testing of the endoscope should be done each time before the cleaning process starts.

Ensure immersion cap is placed on all videoscopes.

If damage is detected or bubbling occurs, ensure the pressure is maintained through the leakage tester and proceed to carry out a thorough external cleaning and cleaning of the internal channels. Follow your service provider's instructions concerning disinfection of a damaged fiberscope. However, with proper maintenance of internal pressure, manual disinfection of the scope in many cases can be achieved. Send to the repair service immediately. If the scope cannot be cleaned prior to transport, ensure that it is clearly labeled 'contaminated'.

Cleaning

Meticulous manual cleaning is the most important step in the cleaning process. It is imperative that all channels, removable parts and all

immersible parts of the endoscope be cleaned.

Wipe the outer surface with enzymatic soaked gauze immediately after removal of the endoscope from the patient. Using the air/ water channel valve, flush the air/ water channel with water from the water bottle. Transport the scope to the cleaning area.

- If unable to initiate the manual cleaning process immediately, the endoscope may be flushed and then soaked with enzymatic solution.
- Leakage test the scope following the manufacturer's instructions.
- Fully immerse the scope in a solution with an enzymatic cleaner to prevent the drying of secretions. Brush all channels to remove the organic material and decrease the number of organisms present. Ensure that access to the air/ water/ CO₂ channel is attained, as these channels are very difficult to clean.
- Ensure the outer surface of the scope is thoroughly cleaned. Use of a soft bristle toothbrush to clean the lens end is acceptable.
- All channels must be brushed and irrigated to remove particulate matter. A channel irrigator should be used to facilitate complete cleaning of all channels.
- Rinse all the channels and the endoscope thoroughly with water following the cleaning process to remove the residual of the enzymatic agent.
- Remove all excess water from the channels by injecting air via the all channel irrigator to decrease the possibility of dilution of the disinfectant solution.
- Clean all non-immersible parts with a hospital recommended surface disinfectant.
- Non-immersible endoscopes should be replaced because they are very difficult to clean and disinfect.

Sterilization and Disinfection

When deciding whether to sterilize or disinfect the endoscope, it is important to refer to the following classifications;

1. Critical devices are those that enter sterile tissue: the vascular system or body space (i.e. biopsy forceps, polyp snares and surgical instruments).
2. Semi-critical devices (i.e. laryngoscopes, endoscopes) come into contact with mucous membranes or non-intact skin during use and should at least receive high-level disinfection (defined as the inactivation of all micro-organisms with the exception of bacterial endospores).
3. Non-critical devices (i.e. blood pressure cuffs, bedpans) come into contact with intact skin.

Endoscopes that come into contact with mucous membranes are classified as semi-critical items.

Endoscopes that enter sterile body cavities are classified as critical items.

- High level disinfection of the endoscope internally and externally must be performed after scrupulous mechanical cleaning has been completed. All processes will be rendered ineffective if any organic material or moisture is present on or in the endoscope.
- Chemical agents registered with Canada Health and Welfare, as sterilant/disinfectants are appropriate for high level disinfection. To ensure efficacy, the manufacturer's instructions regarding use of disinfectant must be adhered to.
- All internal and external surfaces and channels must be in contact with the disinfecting agent for not less than 20 minutes.
- Disinfectant agents must be chosen carefully and must be used according to the manufacturer's instructions including monitoring chemical concentrations. Effective use-life is more dependent on frequency of use rather than on a

predetermined time or duration of use.

- Ethylene Oxide (ETO) gas sterilization requires an extended time to complete the sterilizing and aeration process. This may not always be practical.
- The Peracetic Acid based automated system sterilizes immersible instruments and rinses them with sterile water. Contact of all external and internal surfaces with the sterilant must occur. Check with the manufacturer's instructions regarding the cleaning of the elevator channel of the duodenoscope.
- Hydrogen Peroxide (H₂O₂) is acceptable for endoscopic reprocessing although it can damage the external surfaces of the insertion tube and corrodes copper, zinc and brass.

Rinsing

To remove all traces of the disinfectant, adequate rinsing must follow the disinfection process. Any residual chemical can cause toxic effects in a patient if it is transmitted during the next endoscopic procedure.

The use of sterile water for rinsing is recommended. If tap water is used, follow with 70% alcohol rinse and dry with compressed air.

Drying

Air drying by the use of forced air should be done after disinfection and before storage.

Prior to storage, facilitate drying of the endoscope by flushing all channels with a 70% isopropyl alcohol followed by forced air. Dry the insertion tube completely. Moist environments are conducive to bacterial growth.

Channel valves should remain out of scopes at the time of storage to facilitate the drying of channels.

Storage

Endoscopes should be stored hanging vertically in a well-ventilated area in a manner that prevents recontamination or damage. They should not be coiled and stored in their cases.

Wipe down the storage cupboard with disinfectant solution weekly.

Documentation

Results of disinfectant solution testing should be documented. Institutional policy may require documentation of disinfection cycles.

Culturing

Culturing requires very precise techniques done in close consultation with an infection control department. Institutional policy may dictate when and how culturing of scopes should be carried out.

Special Considerations

Sterilization or high level disinfection should be used as directed by institutional policy. Diagnosed or suspected infection, including Hepatitis B, VRE, MRSA or HIV is not a contraindication for endoscopy. It is not recommended to have instruments dedicated for use with infected patients.

RECOMMENDATIONS FOR ACCESSORIES

Non-disposable accessories require meticulous manual cleaning and disinfection or sterilization after each use according to manufacturer's guidelines and as directed by institutional policy.

Biopsy Forceps

Meticulous manual cleaning with an enzymatic agent is required as soon as possible after the procedure.

Ultrasonic cleaning is recommended to remove debris that hand cleaning cannot.

Biopsy forceps break the mucosal barrier. Therefore they are classified as critical instruments and require sterilization.

The only method that will effectively penetrate the metal coils of the spring-like structure and any residual organic material is steam under pressure. Chemical sterilization does not completely penetrate the coils and therefore is not effective.

Water Bottle

According to manufacturer's instructions, sterilize or high level disinfect the water bottle and its connecting tubing at least daily.

For endoscopic irrigation, fill the bottle with sterile water.

Each ERCP procedure requires a fresh sterile bottle with sterile water. *Pseudomonas aeruginosa* colonization of equipment has been associated with patient infection following ERCP.

Other Accessories

Clean all non-disposable accessories (i.e. polyp snares, tripods and foreign body forceps) meticulously with an enzymatic agent followed by rinsing thoroughly with water. Use the ultrasonic cleaner prior to steam autoclave.

Consult the manufacturer if steam sterilization is not applicable.

Critical accessories (i.e. sclerotherapy needles, electrocautery probes and hot biopsy forceps) should be sterilized or discarded after each use.

Medical Equipment

Keep all non-critical equipment (i.e. teaching heads, light sources, cameras) visibly clean with soap and water or recommended institutional disinfectant.

If significantly soiled, use an intermediate disinfectant after cleaning.

RECOMMENDATIONS FOR ENVIRONMENT

General Cleaning

For general wipe-down of equipment such as procedure carts, stretchers, sinks, etc. after each use, an EPA registered housekeeping product is recommended.

Spills

In keeping with Universal Precautions:

- Use gloves; blot spills of blood or body fluid with disposable towels.
- Wipe the area with clean, disposable towels soaked in a freshly prepared household bleach (1:10) dilution or an EPA registered tuberculocidal ‘hospital disinfectant’ and allow to dry.

Disinfectant spills should be handled by consulting the solution MSDS (Material Safety Data Sheet) WHMIS Guidelines.

Waste

Minimal handling of all medical waste should be encouraged.

The storage and disposal of waste should be handled according to institutional policy and provincial and federal guidelines.

Processing Area

Patient care areas should be separate from cleaning/ disinfection areas.

Clean and dirty areas should be separate with proper plumbing and drains. Adequate storage space should be provided.

The use of covered containers and proper ventilation to remove toxic vapors is essential.

Periodic air quality monitoring of glutaraldehyde levels should be performed.

AUTOMATED WASHERS/ DISINFECTANTS

Endoscopy unit cleaning/disinfecting process may be standardized by the use of scope washer/ disinfectants. This equipment may be useful in circulating germicides, containing vapors and decreasing exposure of personnel to contaminated equipment and disinfectants.

Meticulous manual cleaning must precede the use of any automated system as previously described.

Clean all non-immersible parts of the endoscope with hospital recommended surface disinfectant.

The following capabilities must be present in any washer/ disinfectant;

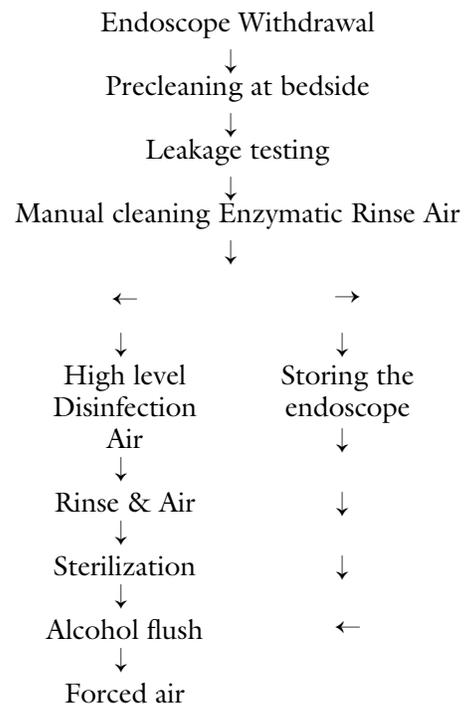
- Enzymatic and/ or disinfectant should be circulated through all channels at equal pressure without trapping air.
- Washing and disinfecting cycles should be followed by thorough rinsing cycles followed by forced air to remove the used solution.
- Disinfectant should not be diluted with wash or rinse water.
- Routine disinfection of the washer/disinfectant according to the manufacturer’s recommendations and institutional policy must be

done.

Other considerations;

- A channel irrigator may miss a blockage of one channel.
- When used to disinfect duodenoscopes, ensure that the channel for the elevator is cleaned and disinfected as part of the processing cycle or it may require manual processing.
- A forced air-drying cycle or air-drying should be completed by hand after the final rinse.
- If unsterile water is used in the final rinse following the disinfection cycle all endoscope channels must be flushed with 70% alcohol and dried with air.
- Colonization of bacteria may be caused by residual water remaining in the water hoses and reservoirs. This could lead to contamination during subsequent instrument processing.

CLEANING DISINFECTION AND STERILIZATION PROCEDURES



BIBLIOGRAPHY

- "Virus transmission via Fiberoptic Endoscope: Recommended Disinfection". Endoscopy Review, March/April 1989, 63-64
- "Multi-state Investigation of the Actual Disinfection / Sterilization of Endoscopes in Health Care Facilities," The American Journal of Medicine, March/April 1992
- "Infection Control During Gastrointestinal Endoscopy" Gastrointestinal Endoscopy, vol.34 (suppl.3) (May/June 1988, 37s-40s)
- "Pseudomonas Infection Linked to Contaminated Endoscopes" Hospital Infection Control, Vol. 14 no. 5 (May 1987), 69-84
- "Standard Practice for Cleaning and Disinfection of Flexible Fiberoptic and Video Endoscopes Used in the Examination Of Hollow Viscera" ASTM 1994
- Agerton, T., Valway, S., Gore, B., Pozsik, C., Plikaytis, B., Woodley, C., Onorator, I., "Transmission of a Highly Drug-Resistant Strain (Strain W.) of Mycobacterium tuberculosis." JAMA 1997; Vol 278, 1073-1077
- Dwyer, D., Klien, G., et al. "Salmonella Newport Infection Transmitted by Fiberoptic Colonoscopy." Gastrointestinal Endoscopy, vol.33, no2, 84-87
- Favaro, M.S. and Bond, W., "Sterilization, Disinfection and Antisepsis in the Hospital" Manual Of Clinical Microbiology (5th E.) Washington, DC: American Society for Microbiology, 1990.
- Hendrick, E.: "Cleaning and Disinfection of Endoscopes". Plant, Technology And Safety Management Series, no3 (1989), 42-46
- Hendrick, E. et al. "Gastrointestinal Endoscopy-Infection Transmission And Prevention" Asepsis, Vol.9, no3 (1987), 2-10
- Jonas, G., Mahoney, A., Murray, J., and Gertler, S. "Chemical Colitis Due to Endoscope Cleaning Solutions: A Mimic of Pseudomembranous Colitis." Gastroenterology vol.95 (1988), 1403-8.
- Lutz, B. "Every Patients Right" ASTM Standardization News. 1995, August 32-35
- Society of Gastroenterology Nurses and Assistants. Recommended Guidelines for Infection Control (2nd Ed.) Rochester, NY: 1992.
- Martin, A.M. Reichelder, M "APIC GUIDELINES FOR INFECTION CONTROL PRACTICE: APIC guidelines for infection prevention and control in flexible endoscopy" AJIC AM J INFECTION Control 1994; 22:19-38
- "Transmission of Mycobacterium Tuberculosis by a fiberoptic Bronchoscope" JAMA 1996: 1093-1095
- Muscarella, L., "High-level disinfection or sterilization of endoscopes" Infection Control and Hospital Epidemiology. March 1996; 17: 183-187.
- Olympus Evis 100 & 130 Cleaning and Disinfection Video 1997.
- Olympus Evis 140 Reprocessing Video 1998.
- Rutala, W.A., "APIC Guideline for selection and use of Disinfectants." American Journal of Infection Control, vol. 18, no.2 (April 1990), 99-117.
- Rutala, N. "FDA Labeling Requirements for Disinfection of Endoscopes: A Counterpoint" Infection Control And Hospital Epidemiology 1995. 1995;16(4) 231-235.
- SGNA Guidelines for the use of High Level Disinfectants and Sterilants for Reprocessing of Flexible Gastrointestinal Endoscopes Feb 2000.
- SGNA Standards of Infection Control in Reprocessing of Flexible Gastrointestinal Endoscopes Feb 2000.
- Advanced Sterilization Products (1999) Cidex OPA Solution Material Safety Data Sheet (015) revision C.
- SGNA Standards of Infection Control in Reprocessing of Flexible Gastrointestinal Endoscopes Feb 2000.
- Decontamination of Reusable Medical Devices CSA International 2314:8-00 March 2000

MINI QUIZ: GI NURSING CORE CURRICULUM

- The outermost layer of the esophagus is made up of:
 - Mucosa
 - Submucosa
 - Muscularis
 - Serosa
- Outpouchings of the esophageal wall located immediately above the lower esophageal sphincter are known as:
 - Zenkers diverticulum
 - Traction diverticula
 - Epiphrenic diverticula
 - Intramural diverticulosis
- A saclike structure in the pancreas that is filled with fluid, blood, and pancreatic enzymes is called a:
 - Pancreatic rest
 - Pancreas divisum
 - Annular pancreas
 - Pseudocyst
- The parietal cells secrete:
 - Mucus
 - Hydrochloric acid and intrinsic factor
 - Pepsinogens
 - Gastrin

See answers on page 8.

CHANGE OF NAME ADDRESS/NAME

Name: _____

New Address: _____

City: _____ Province: _____

Postal Code: _____ Phone: _____

Fax: _____ E-Mail: _____



**MOVING?
LET US KNOW!**

**Remember to send in your
change of address!**

WORD SEARCH

- ASPIRATE
- CHART
- CIDEX
- COLON
- DUODENOSCOPE
- EDMONTON
- ENZYMES
- ESOPHAGUS
- GASTRIN
- GASTROSCOPY
- GUIDING LIGHT
- LIVER
- NEWSLETTER
- NURSING
- ONCOLOGY
- PANCREAS
- PEN
- POSITION
- PYLORUS
- RADIOLOGIST
- SPHINCTER
- STENT
- STOMACH
- SUCTION

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N	R	H	D	O	N	U	R	S	I	N	G	N	B	Y

GUIDELINES FOR SUBMISSION to "THE GUIDING LIGHT"

- white paper with dimensions of 8 1/2 x 11 inches
- double space
- typewritten
- margin of 1 inch
- submission must be in the possession of the newsletter editor 6 weeks prior to the next issue
- keep a copy of submission for your record
- All submissions to the newsletter "The Guiding Light" will not be returned.

C.S.G.N.A. DISCLAIMER

The Canadian Society of Gastroenterology Nurses and Associates is proud to present The Guiding Light newsletter as an educational tool for use in developing/promoting your own policies and procedures and protocols.

The Canadian Society of Gastroenterology Nurses and Associates does not assume any responsibility for the practices or recommendations of any individual, or for the practices and policies of any Gastroenterology Unit or endoscopy unit.



Canadian Society of Gastroenterology Nurses & Associates

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Canadian Society of Gastroenterology Nurses & Associates

SCHOLARSHIP AWARDS 2001

CAG

Jennifer Belbeck, Stoney Creek, Ontario

CSGNA REGIONAL

CSGNA ANNUAL

Dianne Gray, Windsor, Ontario

Debra Ann St. Louis, Tecumseh, Ontario

Rachel Thibeault-Walsh, Ottawa, Ontario

Pamela Hebert, St. Clair Beach, Ontario

Robert W. Smith, Midland, Ontario

Monique Travers, Orleans, Ontario

Patsy Gosse, Torbay, Newfoundland

Mabel Chator, Conception Bay, Newfoundland



Judy, Marlene, Sandy and Lorie – Happy Bunch!



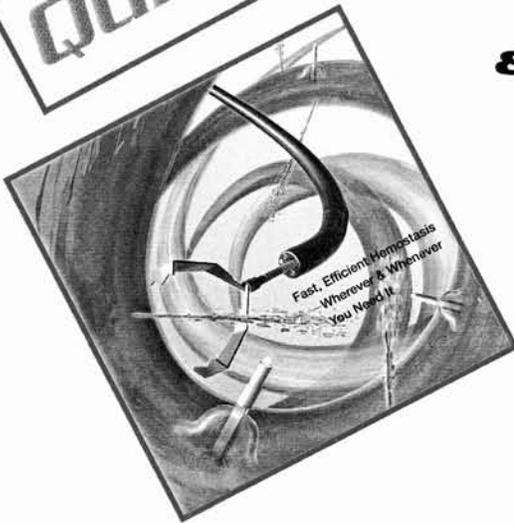
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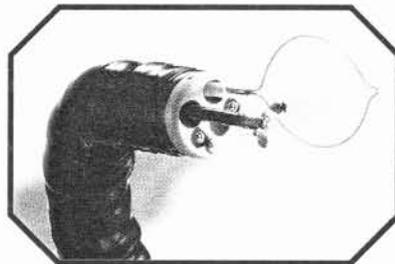
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Canadian Society of Gastroenterology Nurses & Associates

C/O EDUCATION CHAIR: MARLENE SCRIVENS, 2107 BONNEAU PLACE, REGINA, SASK. S4V 0L4

APPLICATION FORM FOR CSGNA REGIONAL SCHOLARSHIPS AWARD

The Regional Conference award of \$400.00 is to be used for travel and accommodation to a Regional Conference in Canada. Six scholarships will be awarded yearly.

EXCEPTIONS:

1. Applicant cannot have received **THIS** award in the previous two years.
2. Current members of the Executive and Conference Planning Committee are not eligible for this award.
3. Scholarships are available only to active members.

PLEASE SUBMIT THE FOLLOWING WITH THIS APPLICATION:

1. A written summary of how this scholarship and attendance at the proposed meeting would benefit you in your work.
2. A current Curriculum Vitae.
3. Please specify your past involvement in the CSGNA: e.g., acted as speaker at a meeting, actively recruited new members for CSGNA, aided in the formation of a local Chapter, served on an Ad Hoc Committee, and any Newsletter articles submitted. Describe your current involvement with your Chapter: e.g., fundraising or planning Chapter conferences.
4. Outline projected financial needs to attend this meeting.
5. Geographical location and related travel expenses will be taken into consideration by the Education Committee when scoring applications.

APPLICATION FORM AND SUBMISSIONS MUST BE RECEIVED BY THE EDUCATION CHAIR AT THE ABOVE ADDRESS AT LEAST 8 WEEKS PRIOR TO THE EVENT.

NAME: _____

CIRCLE ALL THAT APPLY: RN BSN BAN MSN OTHER _____

HOME ADDRESS: _____

CITY: _____ PROV: _____

POSTAL CODE: _____ HOME TELEPHONE: () _____

FAX: () _____

NAME OF THE MEETING YOU WISH TO ATTEND: _____

DATE OF THE MEETING: _____

CITY WHERE PROPOSED MEETING WILL BE HELD: _____

JOINED THE CSGNA IN ____ (year).

SIGNATURE _____ DATE _____



Canadian Society of Gastroenterology Nurses & Associates

C/O EDUCATION CHAIR: MARLENE SCRIVENS, 2107 BONNEAU PLACE, REGINA, SASK. S4V 0L4

APPLICATION FORM FOR CSGNA ANNUAL SCHOLARSHIP AWARD

The Annual National Conference award of \$700.00 is to be used for travel and accommodation to the Annual National Conference in Canada.

EXCEPTIONS:

1. Applicant cannot have received **THIS** award in the previous two years.
2. Current members of the Executive and Conference Planning Committee are not eligible for this award.
3. Scholarships are available only to active members.

PLEASE SUBMIT THE FOLLOWING WITH THIS APPLICATION:

1. A written summary of how this scholarship and attendance at the proposed meeting would benefit you in your work.
2. A current Curriculum Vitae.
3. Please specify your past involvement in the CSGNA: e.g., acted as speaker at a meeting, actively recruited new members for CSGNA, aided in the formation of a local Chapter, served on an Ad Hoc Committee, and any Newsletter articles submitted. Describe your current involvement with your Chapter: e.g., fundraising or planning Chapter conferences.
4. Outline projected financial needs to attend this meeting.
5. Geographical location and related travel expenses will be taken into consideration by the Education Committee when scoring applications.
6. Copy of CSGNA Membership Card.

APPLICATION FORM AND SUBMISSIONS MUST BE RECEIVED BY THE EDUCATION CHAIR AT THE ABOVE ADDRESS BY JUNE 1 OF THE CURRENT YEAR.

NAME: _____

CIRCLE ALL THAT APPLY: RN BSN BAN MSN OTHER _____

HOME ADDRESS: _____

CITY: _____ PROV: _____

POSTAL CODE: _____ HOME TELEPHONE: () _____

FAX: () _____ E-MAIL: _____

HOSPITAL/EMPLOYER: _____

WORK ADDRESS: _____

CITY: _____ PROV: _____

POSTAL CODE: _____ JOINED THE CSGNA IN _____ (year).

SIGNATURE _____ DATE _____



Canadian Society of Gastroenterology Nurses & Associates

C/O EDUCATION CHAIR: MARLENE SCRIVENS, 2107 BONNEAU PLACE, REGINA, SASK. S4V 0L4

APPLICATION FORM FOR CAG NURSE SCHOLARSHIP PRIZES

The Canadian Association of Gastroenterologists (CAG) scholarship prizes are available to one research nurse and one endoscopy nurse in the amount of \$500.00 each, to be used for travel to an appropriate endoscopic gastroenterology or research meeting. The CAG nurse scholarship prize is sponsored by an Educational Grant from the Canadian Association of Gastroenterology.

ELIGIBILITY:

1. You are and have been for two years or more, an active member of the CSGNA.
2. You actively support CSGNA goals and objectives.

PRIZE APPLYING FOR: (please circle one) RESEARCH NURSE ENDOSCOPY NURSE

PLEASE SUBMIT THE FOLLOWING WITH THIS APPLICATION:

1. A two page summary of how this scholarship and attendance at the proposed meeting would benefit you in your research / endo - clinical role in gastroenterology, and what self initiated research projects you are involved in.
2. A current Curriculum Vitae.
3. A letter of reference from your Unit Director.
4. Two letters of reference from CAG members.
5. Copy of CSGNA Membership Card.

APPLICATION FORMS AND SUBMISSIONS MUST BE RECEIVED BY THE EDUCATION CHAIR AT THE ABOVE ADDRESS BY FEBRUARY 15 OF THE CURRENT YEAR. THEY WILL BE FORWARDED TO THE SECRETARY OF THE CAG FOR SELECTION.

NAME: _____

CIRCLE ALL THAT APPLY: RN BSN BAN MSN OTHER _____

HOME ADDRESS: _____

CITY: _____ PROV: _____ POSTAL CODE: _____

HOME TELEPHONE: () _____ FAX: () _____

HOSPITAL / EMPLOYER: _____

WORK ADDRESS: _____

CITY: _____ PROV: _____ POSTAL CODE: _____

NAME OF DIRECTOR OF UNIT: _____

NAME OF THE MEETING YOU WISH TO ATTEND: _____

DATE OF THE MEETING: _____ CITY WHERE MEETING WILL BE HELD: _____

JOINED THE CSGNA IN _____ (year). E-MAIL: _____

SIGNATURE _____ DATE _____



Canadian Society of Gastroenterology Nurses & Associates

180 Waterford Br. Rd., St. John's, Newfoundland A1E 1E2

NOMINATION FORM

Please complete this form and submit to the Chair of the Nominations Committee (currently the President of the CSGNA) 150 days before the Annual Meeting for national office. Ballots will be sent to the active members 120 days before the Annual meeting and must be returned within 90 days.

Candidates must be active CSGNA members in good standing.

Name of nominee: _____

Address: _____

_____ Postal Code _____

Phone (home) _____ (work) _____

Employer: _____

Title: _____

Education: _____

CSGNA member since: _____

Offices held: _____

Committees: _____

Other related activities: _____

Explain what has led you to chose to run for national office? _____

I hereby accept this nomination for the position of _____

dated this _____ day of _____ 20____. Signed _____

Nominated by _____ & _____

SIGNEA MEMBERSHIP MEMBERSHIP APPLICATION

SOCIETY OF INTERNATIONAL GASTROENTEROLOGICAL NURSES AND ENDOSCOPY ASSOCIATES

Individual Membership

Individual Memberships for Gastroenterological Nurses and Endoscopy Associates are available for \$10.00 annually (\$US).

Affiliate Membership

Individuals interested in joining SIGNEA, such as physicians, other medical professionals, and non G.E. nurses, pay affiliate membership fees of \$50 annually (\$US).

National G.E. Nursing Organization Membership

Membership in SIGNEA is available to national nursing organizations. Membership inquiries may be sent to the SIGNEA Secretariat. National G.E. Nursing organization dues are dependent upon the number of national members in each organization. Membership applications should be accompanied by payment and the name of the organization's official contact person.

Corporate Membership

SIGNEA welcomes corporate memberships by companies which supply G.E. products, drugs, general medical equipment and any service that would be utilized by G.E. nurses. Detailed corporate membership information may be obtained from: Pat Pethigal, Chair, fax: 206.223.6379, phone: 206.223.6965 or the SIGNEA Secretariat.

Check Membership Level/Payment		1 year	2 year	3 year
Individual Membership		\$10 <input type="checkbox"/>	\$20 <input type="checkbox"/>	\$30 <input type="checkbox"/>
Affiliate Membership		\$50 <input type="checkbox"/>	\$100 <input type="checkbox"/>	\$150 <input type="checkbox"/>
National G.E. Nursing Membership	up to 100	\$50 <input type="checkbox"/>	\$100 <input type="checkbox"/>	\$150 <input type="checkbox"/>
	101 - 400	\$200 <input type="checkbox"/>	\$400 <input type="checkbox"/>	\$600 <input type="checkbox"/>
	401 - 1,000	\$400 <input type="checkbox"/>	\$800 <input type="checkbox"/>	\$1,200 <input type="checkbox"/>
	Over 1,000	\$750 <input type="checkbox"/>	\$1,500 <input type="checkbox"/>	\$2,250 <input type="checkbox"/>
Corporate Membership		\$1,000 <input type="checkbox"/>	\$2,000 <input type="checkbox"/>	\$3,000 <input type="checkbox"/>

WORKPLACE

- Endoscopy Unit/Hospital
 Endoscopy Unit/Clinic
 Inpatient/Outpatient

POSITION

- Administrative/Director
 Consultant Nurse
 Head Nurse
 Staff Nurse
 Supervisor/Coordinator
 Technician (Patient Care)
 Clinical Specialist
 Educator
 Researcher
 Technician (machine)
 Nurse Practitioner
 Manufacturer Representative
 Corporate nurse Consultant
 Other _____

Please add an additional \$15 for those checks that are drawn off Non-US banks. \$ _____ Total Pymnt.

First Name (Given Name) _____

Last Name (Family Name) _____

Years Education/Training

- _____ 1 Year
 _____ 2 Year
 _____ 3 Year
 _____ 4 Year
 _____ 5 Year

Address for Mail _____

City _____

State/Province _____

Country _____

Postal Code _____

Telephone _____

Fax _____

Email address _____

Employing Organization _____

Title _____

Send completed form to:

Kimberly Svevo, SIGNEA

401 N. Michigan Ave., Suite 2200 Chicago, IL 60611 USA

Phone: 312.644.6610 Fax: 312.321.6869 E-mail: kimsvevo@sba.com



SGNA Membership Application

CONTACT INFORMATION (Please print or type.)

First MI Last _____

Nickname _____

Hospital/Office/Company Name _____

Social Security Number _____ Date of Birth _____

Credentials

Nursing: RN LPN LVN

Education: PhD MSN MS
 BSN BS ADN
 DIPL

Certification: CGRN CGN CGA
 CGT CGC
 Other _____

Certification Date: _____

Other Training: Technician
 Nursing Assistant

Please provide both addresses and check your preferred mailing address:

Work

Street Address _____

City _____

State/Province _____ Zip _____

Country _____

Phone _____

Fax _____

Home

Street Address _____

City _____

State/Province _____ Zip _____

Country _____

Phone _____

Internet/E-Mail Address _____

REFERRED BY

(If applicable) _____

PROFESSIONAL PROFILE

1.) Professional Setting (Check one.)

Free Standing/ Ambulatory Equipment Sales

GI Clinic GI Nursing Room

Inpatient Only Outpatient Only

Inpatient/Outpatient Combination Manufacturer's Office

Other _____

2.) Position (Check one.)

Administrative/ Director Clinical Specialist

Consultant Educator

Head Nurse Researcher

Staff Nurse Nurse Practitioner

Supervisor/ Coordinator Sales

Technician (patient care) Technician (machine)

Other _____

3.) Memberships in Other Nursing Organizations (Check all that apply.)

ANA/SNA AACN

ENA ASPAN

AORN Sigma Theta Tau

Other _____

PAYMENT INFORMATION • dues subject to change

A. Membership (SGNA membership runs on a calendar year and is renewable by January 1 of the following year.)

Check the category of membership for which you are applying:

Voting Status	Type	Definition	Annual Dues	Prorated Dues (If joining after July 1)
<input type="checkbox"/> Voting	Licensed Nurse	Limited to Registered Nurses and Licensed Vocational/ Practical Nurses involved in, or associated with, gastroenterology and/or endoscopy nursing practice	\$105.00	\$60.00
<input type="checkbox"/> Voting	Associate	Limited to Assistive Personnel - technicians, technologists, assistants involved in, or associated with, gastroenterology and/or endoscopy nursing practice	\$105.00	\$60.00
<input type="checkbox"/> Non-Voting	Affiliate	Includes, but is not limited to, physicians, consultants, industry representatives, educators involved in, or associated with, gastroenterology and/or endoscopy nursing practice	\$90.00	\$45.00

SUBTOTAL A _____

B. Regional Societies

All voting members (licensed nurses and associates) residing in the U.S. are required to affiliate with an SGNA regional society.

Regional Society preference (Indicate two-digit code of preferred region from the table listed on opposite page.): _____

Regional Society Dues:

Voting Licensed Nurses and Associates

No additional payment needed
Included in Annual Dues Amount

Non-Voting Affiliate

Optional payment, if interested
please indicate preferred region above
and remit an additional \$15.00
(If after July 1, remit \$75.00)

SUBTOTAL B (If applicable): _____



Canadian Society of Gastroenterology Nurses & Associates

27 Nicholson Dr., Lakeside, Nova Scotia B3T 1B3

MEMBERSHIP APPLICATION

(CHECK ONE)

ACTIVE
\$40.00

Open to nurses or other health care professionals engaged in full- or part-time gastroenterology and endoscopy procedure in supervisory, teaching, research, clinical or administrative capacities.

AFFILIATE
\$40.00

Open to physicians active in gastroenterology/endoscopy, or persons engaged in any activities relevant to gastroenterology/endoscopy (includes commercial representatives on an **individual** basis).

LIFETIME
MEMBERSHIP

Appointed by CSGNA Executive.

FORMULE D'APPLICATION

(COCHEZ UN)

ACTIVE
40,00\$

Ouvert aux infirmières et autres membres de la santé engagés à plein ou demi-temps en gastroentérologie ou procédure endoscopique en temps que superviseurs, enseignants, recherches application clinique ou administrative.

AFFILIÉE
40,00\$

Ouvert aux médecins, actifs en gastroentérologie endoscopique ou personnes engagés en activités en gastroentérologie/endoscopiques incluant représentants de compagnies sur une base individuelle.

MEMBRE
À VIE

Appointed by CSGNA Executive.

APPLICANT INFORMATION / INFORMATION DU MEMBRE

Please print or type the following information / S.V.P. imprimer ou dactylographier l'information

SURNAME / NOM DE FAMILLE _____ PRÉNOM / FIRST NAME _____
 MR / M MRS / MME MISS / MLLE MS / MS

HOME ADDRESS / ADRESSE MAISON _____

CITY / VILLE _____ PROV. / PROV. _____ POSTAL CODE / CODE POSTAL _____ HOME PHONE / TÉLÉPHONE () _____

HOSPITAL/OFFICE/COMPANY NAME / NOM DE HÔPITAL/BUREAU/COMPAGNIE _____

TITLE / POSITION _____ E-MAIL: _____

BUSINESS ADDRESS / ADRESSE TRAVAIL _____
CITY / VILLE _____ PROV. / PROV. _____ POSTAL CODE / CODE POSTAL _____

BUSINESS PHONE / TÉLÉPHONE TRAVAIL () _____ EXT. LOCAL _____ FAX / TÉLÉCOP. () _____

CHAPTER NAME / NOM DU CHAPITRE _____ TITLE / POSITION _____

SEND MAIL TO (CHECK ONE) HOME BUSINESS ENVOYEZ COURRIER À (COCHEZ UNE) MAISON TRAVAIL

EDUCATION (CHECK ONE) RN RNA TECH OTHER (EXPLAIN)
ÉDUCATION (COCHEZ UN) IN I AUX TECH AUTRE (SPÉCIFIEZ) _____

MEMBERSHIP (CHECK ONE) RENEWAL NEW ABONNEMENT (COCHEZ UN) RÉNOUVELLEMENT NOUVEAU

WOULD YOU BE INTERESTED IN HELPING ON ANY OF THE FOLLOWING COMMITTEES?

- BY-LAW
- STANDARDS OF PRACTICE
- EDUCATION
- MEMBERSHIP
- CONFERENCE PLANNING
- NEWSLETTER

I have enclosed my cheque payable to CSGNA. (Mail with this completed application to the above address.)

SERIEZ-VOUS INTÉRESSÉS À AIDER EN FAISANT PARTIE DE CERTAINS COMITÉS?

- BY-LAWS
- STANDARD DE PRATIQUE
- ÉDUCATION
- ABONNEMENT
- PLANIFICATION CONFÉRENCE
- JOURNAL

J'ai inclus mon chèque payable à CSGNA. (Envoyez avec cette formule d'application dûment remplie à l'adresse ci-haut mentionnée.)

CSGNA 2000-2001 Executive

PRESIDENT

LORRAINE MILLER HAMLYN

180 Waterford Br. Rd.
St. John's Newfoundland
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