SEPTEMBER 2014

THE

VOLUME 46 NO 9

SURGICAL TECHNOLOGIST

OFFICIAL JOURNAL OF THE ASSOCIATION OF SURGICAL TECHNOLOGISTS, INC.

Carotid



Ruhof's new Endozime® Bio-Clean is the only enzymatic detergent that breaks through the extracellular polymeric layer that encases biofilm allowing for the complete elimination of all bioburden and biofilm by high-level disinfectants.

Endozime® Bio-clean is also the only enzymatic detergent on the market clinically tested to pass ISO 15883 Annex F*.

*ISO/TS 15883-5: 2006 - Washer-disinfectors - Part 5: Test soils and Test soil and method fo flexible endoscopes. (Test results available



ScopeValet™ **ECO-BEDSIDE KIT** (Eco-Bedside Kit's tray and lid are 100% Biodegradable)



ENDOZIME® BIO-CLEAN

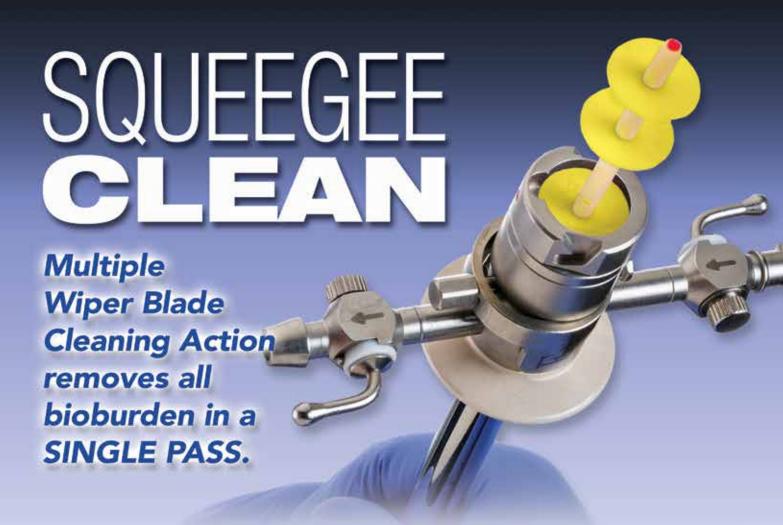




PREPZYME®







The CS/SPD PULL THRU™ instrument cleaning brush effectively removes all bioburden from hard-to-reach narrow lumen channels in a SINGLE PASS. PULL THRU™'s unique multiple wiper blade design safely wipes lumen channels clean while creating a suction that mechanically rinses crevices on the lumen walls with enzymatic solution. The SINGLE PASS cleaning action significantly reduces

cleaning time while improving the overall efficacy of the cleaning process.

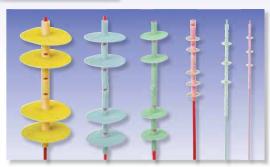
- Proven to remove all bioburden in a SINGLE PASS reducing cleaning time
- For lumen channels from 1mm to 15mm
- Suctions through enzymatic detergent, mechanically rinsing lumen walls
- Provides complete contact with lumen walls, unlike bristle brushes
- Single use device; eliminates the need to sterilize traditional brushes

The CS/SPD PULL THRU™'s 61cm flexible wand allows for easy access through all lumen channels.



of the CS/SPD PULL THRU™ provides a complete circumferential seal in the lumen channel, thereby removing almost all residue in a single pass.





The CS/SPD PULL THRU™ is available in 6 sizes, each is color coded to clearly indicate the wiper circumference.



For More Information and GENEROUS FREE SAMPLES

1-800-537-8463 www.ruhof.com

393 Sagamore Avenue, Mineola, New York 11501 Tel: 516-294-5888 Fax: 516-248-6456 ((

Get Wet

Stay Wet

Prepzyme® Forever Wet

Instrument Transport Humectant Spray

The latest breakthrough in enzymatic pre-cleaning sprays, Prepzyme® Forever Wet's unique humectant properties form a moist coating over the instruments that lasts for days.

- The humectant formulation creates a moisture retention barrier which keeps soiled instruments and scopes moist for a prolonged period of time – unlike a GEL which HAS NO MOISTURE RETENTION properties
- Operating room safe, non-aerosol, multi-tiered enzymatic spray helps prevent bio-burden from drying on the surface of soiled instruments and scopes
- Ideal for transporting soiled instruments that may sit for an extended period of time
- Reduces tray weight during transport compared to liquid presoaks
- Soiled sharps are visible through humectant
- Decreases spills and potential cross-contamination





For More Information and GENEROUS FREE SAMPLES

1-800-537-8463 www.ruhof.com

393 Sagamore Avenue, Mineola, New York 11501 Tel: 516-294-5888 Fax: 516-248-6456



6 West Dru Creek Circle A Littleton, CO 80120 Tel 303-694-9130 A Fax 303-694-9169 Member Number (toll free 8-4:30 pm MT, Mon-Fri) 800-637-7433 **www.ast.org**

STATEMENT OF EDITORIAL PURPOSE The purpose of the Journal is to advance the quality of surgical patient care by providing a forum for the exchange of knowledge in surgical technology and by promoting a high standard of surgical technology performance.

BOARD OF DIRECTORS

Roy Zacharias, CST, FAST	PRESIDENT
Kathleen Demitras, CST-CVS, FAST	VICE PRESIDENT
Glen Mullins, CST, CTBS, CEBT, FAST	SECRETARY
Holly Falcon, CST, FAST	TREASURER
Mollye Banks, cst, crcst	DIRECTOR
Don Braziel, CST, FAST	DIRECTOR
Heather Burggraf, CST	DIRECTOR
Jolane Buss, CST	DIRECTOR
Jean Carty-Turner, CST, CSFA, FAST	DIRECTOR
Nicole Claussen, CST, FAST	DIRECTOR
Sam Waites, CST	DIRECTOR

Board@ast.org Contact your Board:

ASSOCIATION OF SURGICAL ASSISTANTS

Dennis Stover, CST, CSA	PRESIDENT
Douglas Hughes, CSFA, CSA, CST, CRCST	VICE PRESIDENT
Rebecca Hall, CST, CSA, FAST	SECRETARY
Greg Salmon, CSFA, CSA	TREASURER
Paul Beale, CSFA	DIRECTOR
Fred Fisher, CSFA, CSA	DIRECTOR
Shannon Smith, CST, CSFA	DIRECTOR
Crystal Weidman, CST, CSFA, SA-C	DIRECTOR
Jodie Woods, CST, CSFA	DIRECTOR

AST STAFF

CHIEF EXECUTIVE OFFICER
DIRECTOR OF CONTINUING EDUCATION
DIRECTOR OF PUBLISHING
DIRECTOR OF GOVERNMENT AFFAIRS

PUBLICATIONS

Jodi Licalzi, ва EDITOR/PUBLISHING MANAGER

EDITORIAL REVIEW

Teri Junge, CST, CSFA, MEd, FAST

THE SURGICAL TECHNOLOGIST (ISSN 0164-4238) is published monthly by the Association of Surgical Technologists, Inc, 6 West Dry Creek Circle, Suite 200, Littleton, CO 80120-8031. Telephone 303-694-9130. Copyright © 2014 Association of Surgical Technologists, Inc. No article, photograph, or illustration may be reproduced in whole or in part without the written permission of the publisher. Information contained herein is believed to be accurate; however, its accuracy is not guaranteed. Periodical postage is paid at Littleton, Colorado, and additional mailing

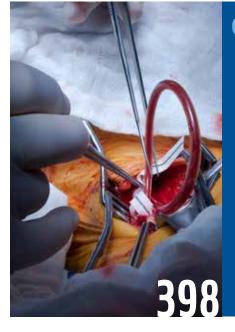
ADVERTISING Send insertion orders and materials to Attn: Advertising, 6 West Dry Creek Circle, Suite 200, Littleton, CO 80120-8031; 303-325 2513; e-mail: exhibits_advertising@ast.org. Acceptance of advertising in The Surgical Technologist in no way constitutes an endorsement by the Association of the product, organization, or service advertised, Similarly, mention of a commercial product by trade name, organization, program, or individual and that person's statements in any article does not constitute an endorsement by the Association of the product or sanction of the organization, program, or individual. The Association accepts health-related and recruitment advertising and reserves the right to decline ads at its discretion. While the Association takes every precaution against mistakes, it assumes no responsibility for errors or inaccuracies.

 $\textbf{SUBSCRIPTIONS} \ \ A \ one-year \ subscription \ is \ \$40 \ for \ nonmembers \ and \ \55 (US funds) for foreign. Back issues are available for \$5 each (specify date of issue). Written requests for replacement issues will be honored up to 60 days after date of publication only. Please address all requests to the editor.

JOURNAL DEADLINES The deadline for editorial copy is 8 weeks prior to the cover date (eg, the deadline for the November issue is September 1).

POSTMASTER Send address corrections to The Surgical Technologist, 6 West Dry Creek Circle, Suite 200, Littleton, CO 80120-8031.





CE EXAMINATION:

Carotid Endarterectomy

CIERRA TURNER, CST

The American Stroke Association estimates that 795,000 Americans suffer from a new or recurrent stroke each year, and one out of every 18 deaths is a result from a stroke. This makes stroke the fourth leading cause of death in the United States. Carotid endarterectomy (CEA) is indicated to prevent a stroke when a patient has carotid artery disease.

416 Happy National Surgical Technologists Week! See if you can relate to these You Might be a Tech if ... phrases

410 Bystander Intervention: How the OR Can Be a Better Place to Work Robert Young, CST, MBA

390		September is for State Assemblies and
770	PRESIDENT'S MESSAGE	Surgical Technology Week Roy Zacharias, CST, FAST
392		
332	AT A GLANCE	AST News and Current Events
200		The Importance of Conflict Management
396	STATE ASSEMBLY	Grant Wilson, CST, SALC CHAIR
400		
406	FINDING MY CALLING	CST Finally Finds Her Perfect Fit
TUU	FINDING MY CALLING	Nicol Bates, CST
100		
408	NBSTSA	Achieving Excellence
440		
418	UPCOMING PROGRAMS	Around the US
140	or community Rounding	Aloulu tile 05
120		
430	ADVERTISER'S INDEX	

GET SOCIAL WITH AST









September is for State Assemblies and Surgical Technology Week ROY ZACHARIAS, CST, FAST PRESIDENT'S MESSAGE

s everyone begins to settle in from enjoying summer vacations, some state assemblies have already had their fall workshops, while others will be getting ready to host them. Throughout the past year, I have visited numerous workshops and I am proud to say that this year you will also see participation from your AST Board of Directors as they begin to attend more state assembly workshops. It is an honor support the state assemblies and meet all of you face to face. And if we are not able to attend your fall workshop, we are already looking into making arrangements for spring meetings. Our purpose for attending is to provide support and manpower. In West Virginia, State President Kimberly Miller had me setting up tables, and Debra Goad, along with Rachel Ray from Arkansas, had me stuffing goodie bags for the members.

Attending state workshops has made it possible for me to identify new members that now have been appointed to AST national committees or been elected to state assembly leadership positions, which is what it is all

about. This is how our new leaders are identified and mentored. Throughout the past few years, with the exception of last year, there have been few members choosing to run for national office. It's important for more members to get involved with their state assembly leadership and then step into the national arena and run for the AST Board or to be considered to fill spots on AST committees. I expect even more candidates to run for national office in 2015.

Regarding the State Assembly Leadership Committee, I am pleased to announce that the committee now has a specific member dedicated to helping every state assembly involve military members. This will be an advantageous opportunity for every state as they work to involve our active and retired military members.

September is the month that surgical technologists all across the country take time to celebrate our profession. I even had the opportunity last year to FaceTime and Skype with surgical technology students.

It is exciting to see the Facebook posts regarding the festivities at hospitals, surgical centers and schools. Sadly, last year I received emails from some of you that said your facility did not celebrate National Surgical Technologist Week. It's not too late to gain approval for this week of recognition. You are a valuable resource not only to your patient's but to your facility. We are all truly proud of our profession and this is our chance to share surgical technology with others and show who we are, what we do and where we work. I encourage each member to stand strong with pride not just during this week of celebration but all the time. Continue to show value and refer to AST Standards of Practice as you demonstrate that you are the only one formally trained and educated to stand at the Mayo and provide the best care to each and every patient.

It is an honor to serve you as President. Your professionalism and expertise is noticed by everyone you come in contact with. Sometimes they may not share what they see, but rest assured that they know you are providing exceptional care — The Patient

Don't forget to post your photos celebrating NSTW to AST's Facebook page! They may even be featured at the AST photography.)



Register online at www.ast.org on the opening page. Click on Instructors Forum registration.

Mail completed registration to: AST, 6 West Dry Creek Circle, Ste 200, Littleton, CO 80120

Fax completed registration to: 303-694-9169

Register by phone: 800-637-7433, ext 2514 (8 am-5 pm MT)

INSTRUCTORS FORUM

FEBRUARY 6-7, 2015 SPONSORED BY AST, ARC/STSA AND NBSTSA CONRAD SAN JUAN CONDADO PLAZA SAN JUAN, PUERTO RICO

FRIDAY, FEB	RUARY 6, 2015				
10 am-5 pm	AST Registration				
8 am-Noon	Accreditation Fundamen	tals for Educators (AFE)	Separate registration at ww	w.arcstsa.org 4 CE	
1-5 pm	ARC/STSA Site Visitor's Training (SVT) Separate registration at www.arcstsa.org 4 CEs Prerequisite: Status as current site visitor or AFE attendance and CAAHEP Site Visitor online training				
5:15-5:30 pm	Welcome!!! AST				
5:30-7:20 pm	Don't Let Your Work Stre	ess You Out Richard Pau	1	2 CE	
7:30-8:30 pm	Reception				
SATURDAY, F	EBRUARY 7, 2015			9 CE	
8-9:50 am	The Interplay Between E Robin Jones, MPA, COTA/L		octional Abilities for Stude	nts 2 CE	
10-11:50 am	Update Revision of Surgical Rotation Case Requirements Kevin Craycraft, CST, FAST; Gemma Fournier, CST, RN, FAST, MSN 2			2 CE	
Noon-12:50 pm	Lunch				
	SE ONE CLASS SECTION F				
Time	Novice Educator Track	Advanced Educator Track	Clinical Educator & Preceptor Track	ARC/STSA & NBSTSA	
1-1:50 pm	□ Is Your Test the Best? Chris Keegan, CST, MS, FAST	Building a Bridge: From Student to Certified Surgical Technologist Joseph Charleman, CST, CSFA, CRCST, LPN, MS & Anbalagan George, CST, MD	Creating & Fostering Amazing Relationships With Your Clinical Sites Cindy Mask, CST, AA, BAAS, FAST	□ Blackboard: Exams at a Distance Rebekah Travis, CST	
2-2:50 pm	Time Management As A Program Director and Faculty Member Libby McNaron, CST, CSFA, RN, CNOR, MSN, FAST	□ Electronics In The Classroom Michelle Gay, CST, BS	□ Collecting Clinical Data Dave Lufkin, CST	NBSTSA Update Ron Kruzel, CST, MA, CAE NBSTSA CEO Kari Allen, NBSTSA Web Based Testing Coordinato	
3-3:50 pm	Six PAC Tiffany Howe, CST, CSFA, MBA	True Colors: A Personality Perspective Don Traverse, CST, MS, FAST	Preceptors Training Students: A Collaborative Approach Audrey Gabel, CST, CRCST, AAS	NBSTSA Update Ron Kruzel, CST, MA, NBSTSA CEO Kari Allen, NBSTSA Web Based Testing Coordinato	
4-4:50 pm	Standards of Practice or Standards vs Practice Libby McRae, CST	Surgical Technologists and Nurses: Working Together in Education Tonya LaForge, CST, RN, CNOR, MSN	TBA	Successfully Completing the ARC/STSA Annual Report (2-hour presentation) ARC/STSA	
5-5:50 pm	Teaching Generation X, Y & Sometimes Z Grant Wilson, CST, MEd	□TBA	□ TBA		
7 am-6 pm	Registration				
7 am-5 pm	Exhibits				

Attendance is limited to 200. Confirmation will be emailed prior to the forum, and onsite registration will be available on a space-available basis. All cancellations must be received in writing by January 30, 2015. Accommodations: Conrad San Juan Condado Plaza, 999 Ashford Avenue, San Juan, Puerto Rico 00907, 787-721-1000. Rates: \$180 per night, single or double occupancy plus 11% tax. Hotel reservation deadline: January 12, or until room block is full. Separate registration is required for Accreditation Fundamentals for Educators (AFE Workshop) and Site Visitor Training. Register at www.arcstsa.org.

INSTRUCTORS FORUM FEES (INCLUDES INSTRUCTORS FORUM EDUCATION SESSIONS, FRIDAY RECEPTION AND SATURDAY LUNCI
--

Date	Member/Cert no			☐ AST member: \$275	\$
Name (please print)				□ Nonmember: \$300	\$
Name of Institution/College	/Program			☐ Guest lunch ticket: x \$35	\$
	CST CSA SA-C (Other		Total:	\$
City	Work phor		·	☐ Money order/check enclosed for \$ ☐ VISA ☐ MC ☐ AmEx Name that appe	
	if same as above, leave blank)			No	
City		State		Total amount charged: \$	Signature



HAPPY NATIONAL SURGICAL TECH-NOLOGY WEEK – SEPTEMBER 21-27!

HOW SURGICAL TECHNOLOGY BEGAN - A SHORT HISTORY

The role of the surgical technologist began on the battlefield. In World War I and World War II the Army used "medics" to work under supervision of the surgeon. Concurrently, medical "corpsman" were used in the Navy. Since nurses were not permitted on the battlefield or aboard combat ship, the military created Operating Room Technicians (ORTs).

Since many medical personnel were overseas and military hospitals performing the bulk of duties, an accelerated nursing program with an emphasis on operating room technology was created. This position was placed in surgical departments and ORTs studied under the surgeon. Studies included the sterilization of instruments and patient care. ORTs were required to know about suture and draping techniques and also had to participate in labor and deliveries and the emergency room.

Then, after the Korean War, a shortage of operating room nurses and a need for more openings in civilian hospitals lead to the need to fill the surgical technologist role. In 1968, the AORN Board of Directors created the Association of Operation Room Technicians (AORT). Then the AORT formed two committees in 1969: The Liaison Council on Certification for the Surgical Technologist or LCC-ST (now the National Board of Surgical Technology and Surgical Assisting or NBSTSA) and the Joint Committee on Education. The first certification examination was given in 1970. Those that passed the exam were then called Certified Operating Room Technician (CORT).

In 1973, AORT made a huge changed. It separated from AORN, became an independent group and changed the title of its position to surgical technologist. It also changed the organization's name to Association of Surgical Technologists, or AST. Since 1973, AST has worked diligently to promote excellence in the surgical technology profession.

Today the surgical tech programs are accredited by ARC/STSA (Accreditation Review Committee for Surgical Technology and Surgical Assisting). Surgical techs who pass the national certification exam, designed by NBSTSA, earn the title of Certified Surgical Technologist. The field of surgical techs continues to evolve and new technologies and career opportunities arise.

MEMBERSHIP

MAKE IT EASY - TAKE CE EXAMS ONLINE

Did you know if you take the CE exams online, your credits automatically post to your file? No more waiting to see when they will post, it's an instant satisfaction! And since you have control over your online profile, you can log in any time to monitor your credits and to gain access to other membership features such as viewing your CE credit history, viewing Journal archives and printing a copy of your AST card.

It's quick and easy and gives you instant peace of mind. You must have a credit card to purchase test online. We accept Visa, MasterCard and American Express. To take the tests online, log in to your membership account on our homepage, www.ast.org. Then you will be prompted with a Services screen. Select Earn Credits Online, log in one more time and then select from the library of tests you would like to take.

For questions regarding CE credit packages or other membership inquires, email memserv@ast.org or call toll free 1-800-637-7433 from 8 am to 4:30 pm MST weekdays.

IS YOUR AST MEMBERSHIP DUE?

Continue being a caring force that's more than 36,000 members strong. Stay informed with exclusive access to cutting-edge education, outstanding networking opportunities and unparalleled programs. Resources specifically designed to support your career growth. AST is a powerful advocate for your profession. Your membership connects you with something greater and more rewarding - a community you simply won't find anywhere else, and a collective voice that deserves to be heard. Be green and renew online today or give us a call at 1-800-637-7433 for Member Services.

OTHER WAYS TO EARN CE CREDITS

In-services through your employer that are relevant to the medical surgical practice of surgical technology and surgical assisting and at least 30 minutes in length are an example of CE credits accepted for renewal of your credential. An in-service through your employer entails a live event held at your place of employment. To submit credits, visit www.ast.org, click on Members, Submit Credits.

Members also can submit college credits that will count toward their CE allotment. Each college hour is worth 5 credits. Members need to earn the college credit within their membership and certification cycle. The accepted list of college courses can be found on our website by clicking on Members - FAQs.

PROFESSIONAL RESOURCES

STANDARDS OF PRACTICE

AST receives quite a few Standards of Practice questions via social media and over the phone. As a reminder, you can simply visit our website to search for a Standard of Practice by clicking on About Us, Standards of Practice.

The Association of Surgical Technologists recognized the need for CSTs and CSFAs to have a comprehensive publication focused on evidence-based Standards of Practice. The Standards of Practice were researched and developed, in order to aid in legislative efforts for state assemblies and to provide readily available answers to questions asked by operating room supervisors. Both the CST and CSFA have been educated with the guidelines set forth by the Association of Surgical Technologists, and the Standards of Practice help to assure patients, practitioners and allied health administrators that, from the classroom to practice, from the hospital to the surgery center, the practice of surgical technology and surgical assisting is aligned with the highest educational and performance standards. The Standards of Practice are statements of the minimum expectation of the profession, designed to be references in establishing safe practice guidelines in individual healthcare facilities that employ CSTs and CSFAs.

The Standards of Practice have been developed on three different levels:

- Position Statements reflect a stance, viewpoint and/or perspective
- Guidelines Statements are guides to best practices
- Standards of Practice are standards of care that are expected to be achieved

The Standards of Practice available on these pages represent only those Standards that have been approved by the AST Board of Directors. SOPS are continually updated and more are added when approved by the Board.

REACH OUT

INTERESTED IN MEDICAL MISSIONS?



Ever considered being a part of a medical mission trip? Maybe you feel like you should give back to the less fortunate or maybe you just like reaching out to those in need, but are unsure how to jumpstart your plans to participate in a medical mission trip. There's a resource to help you get started on your mission.

Operation Giving Back is a program of the American College of Surgeons and was created for the volunteer surgeon. OGB recognizes the team nature of surgical care delivery and the critical contributions of all surgical professionals. OGB attempts to include information relevant to all members of the surgical team.

Their resources page for the surgical team offers lists of how to get active in serving on medical missions. To view this list, visit www.ast.org and click on About Us - Medical Missions.

STUDENTS

TIME TO START THINKING ABOUT SCHOLARSHIPS

The Foundation for Surgical Technology is the nonprofit arm of the Association of Surgical Technologists. One of the reasons that the Foundation was established was to

provide financial assistance to surgical technology students studying in accredited programs. Throughout the years, the Foundation has awarded thousands of dollars to help young practitioners. Many of these recipients have demonstrated common traits. One of the most distinctive characteristics is an ability to share who they are, their personal histories, dreams, goals and challenges. Since students share details of their lives on paper, members of the Foundation Committee feel like they get to "meet" these students. This allows the members to be selective when considering applications and deciding who will receive which scholarship.

The purpose of the scholarship is to encourage and reward educational excellence as well as to respond to the financial need demonstrated by the surgical technology student and offer assistance to those who seek a career in surgical technology.

Selection for the Foundation awards are based on academic excellence and financial need combined. Scholarships also are awarded by the information they provide on their application and the student's transcript. To be eligible applicants must be enrolled in an accredited surgical technology program and eligible to sit for the NBSTSA national surgical technologist certifying examination. They must demonstrate superior academic ability and have a need for financial assistance.

Reward amounts for the Foundation vary and many are supplemented from various state assemblies that are eager to support the students in their state.

Visit our Student Members (Members – Students) page on our website for more information.

SOCIAL

USE PINTEREST TO PLAN YOUR TRIP TO SAN ANTONIO



Check out our San Antonio Pinterest board so you can start planning your trip to AST's 46th Annual National Conference now! We've posted maps, dining suggestions,

things to do and more to make your travel plans easier.

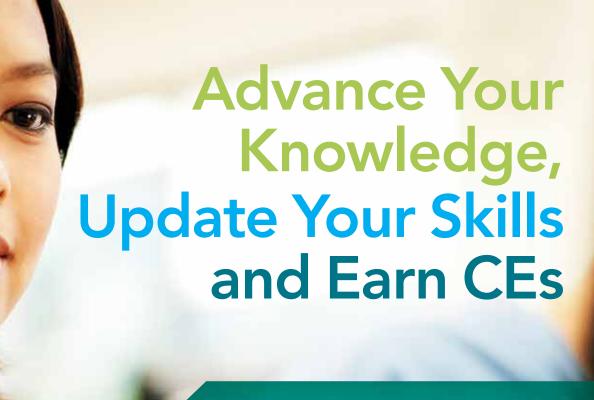
FOLLOW US ON FACEBOOK



If you haven't checked out our Facebook page yet, we invite you to take a look. With more than 23,000 likes, we have active dialogues taking place constantly with new

questions posted all the time. This is your one resource where you can get the best advice from professionals who get what you do because they, too, are surgical technologists. Don't miss out on all the great information. Like us today!





NEW FREE CE OPPORTUNITIES FOR 2014!

Log onto www.ast.org and click on the "Earn CE" menu to access the library of CEs. Click on the numbers and take the tests for free: #313 Radiation Risk (1 CE credit); #339 Taking Control of Infection Control (1 CE credit); #343 Single-site Laparoscopic Total Hysterectomy (1 CE credit). Credits are awarded after passing the tests.

Whenever. Wherever. AST is making continuing education more accessible—more convenient—and even FREE. Now you can look, listen and learn from our quality education presentations that have been archived from national conferences and advanced specialty forums. Specialty topics range from orthopedics, OB/GYN, general and neurosurgery. You will actually see the medical professionals and slides as they were presenting their information. Each presentation is coded by specialty.

Topics include Intrauterine Repair for Spina Bifida, Pelvic and Acetabular Surgery, Infertility, Drug Abuse During Pregnancy, ACL Surgery, Issues in Patient Care, Advances in Spine Surgery, Epithelial Ovarian Cancer, and Preventing Preterm Delivery. Any or all are free to watch and study.

Whenever you're ready, take the examination—there is absolutely no charge. If you pass, you will be offered the opportunity to purchase the accompanying CE credit and register it with AST at a very affordable price.

LOG ON TO THE AST
CONTINUING EDUCATION
RESOURCE CENTER TODAY AT

www.ast.org.

The Importance of Conflict Management GRANT WILSON, CST, SALC CHAIR STATE ASSEMBLY

"Conflict cannot survive without your participation" - Wayne Dyer

rowing up the youngest in a family of five boys, conflict was a normal part of the family routine. The best example was when we would load up in a 1972 Plymouth Valiant to make the two-hour drive to Grandma's house.

First, one would push another and then there was the push back. The car would start to shake as we traveled down the two lane curvy road. Then the time would come for Dad's intervention. This proved to be very effective for five, maybe 10 minutes. Then the scene would repeat. And thus we passed the time as we rode down the road.

Conflict is not a comfortable topic although it is a normal part of any group, family, workplace or even a professional organization. For optimal success, it is important to manage conflict well and use it to promote creative positive growth and change in an organization.

AST is a professional organization approaching 38,000 members with the primary purpose to ensure that surgical technologists have the knowledge and skills to administer patient care of the highest quality. We have common ground in our profession, but we are a large and diverse group of individuals. It is important that we work together collaboratively, not competitively. The more we work toward the goals that AST has put in place for us, the more creative and more effective our solutions and efforts will be. Through collaboration our individual differences can become a strength of our organization.

There are many resources available on conflict management. Those in state assembly leadership positions are encouraged to review some of the information available on this topic. One good summary is provided by MindTools. com, which is an online management training/resource.

The summary of "Conflict Resolution: Resolving Conflict Rationally and Effectively," is that there are different conflict management styles. Most individuals use two styles on a regular basis and may avoid or not be efficient at using the other styles. These styles include:

- Competitive
- Collaborative
- Compromising
- Accommodating
- Avoiding

It is important that we work together collaboratively, not competitively. The more we work toward the goals that AST has put in place for us, the more creative and more effective our solutions and efforts will be.

There are situations that are best managed by each of the styles. In a professional organization a majority of the major decisions are made using a collaborative style. Collaborative style is defined by Tom Hallett (2014) as one in which people "try to meet the needs of all people involved." These people can still be assertive, but cooperate effectively. This style is useful to bring together diverse perspectives into a common goal or solution.

When using conflict resolution, established ground rules are helpful.

- 1. Place priority on maintaining a good relationship. Respect one another, be courteous and constructive.
- 2. Keep people and problems separate.

- 3. Try to understand the other person's perspective.
- 4. Listen before talking.
- 5. Find agreeable "facts" that impact the decision.
- 6. Look for common ground/options together. A process of conflict resolution outlined by Hallett (2014), includes the following steps.
- 1. Set the Scene Agree to ground rules and establish a willingness to resolve the conflict through discussion and negotiation. Be an active listener. Use an assertive approach not a submissive or aggressive one.
- 2. Gather Information Gain insight into the other person's perspective and try to understand his or her motivation and goals. Listen actively, remain flexible, try to identify issues and clarify feelings.
- 3. Agree to the Problem It is important to agree on the problems before being able to find a mutually acceptable solution.
- 4. Brainstorm the Problem This allows everyone to be a part of the solution and have input on the resolution. This is a good time to be open to new ideas.
- 5. Negotiate a Solution Once all sides have gained insight on other perspectives, a mutual solution becomes clear.

I encourage everyone that is involved in state assembly leadership to take some time to look at resources on conflict management. With any group, conflict is going to be part of the process. However, as a professional organization, professionals acting professional is an implied and important foundation. Preparation for conflict will help to ensure that when conflict arises, it leads to growth and positive outcomes instead of negative ones.

It has been incredible watching the growth and development of our state assemblies and AST through the years. By remaining focused on our organization's primary purpose and professionally working together to reach our goals, we will continue to see positive growth for many years to come. And through it all, may the patient always be first - Aeger Primo.

Reference

1. Hallett, T. MindTools.com. (2014). Conflict Resolution: Resolving Conflict Rationally and Effectively. (Online). Available from: http://www.mindtools.com/pages/article/newLDR_81.htm. Accessed July 25, 2014.

Did you just graduate or pass your CST exam? Looking for a job? Then use this FREE service to get noticed!



The Surgical Technologist reaches more than 30,000 medical professionals, hospitals and surgical facilities each month?

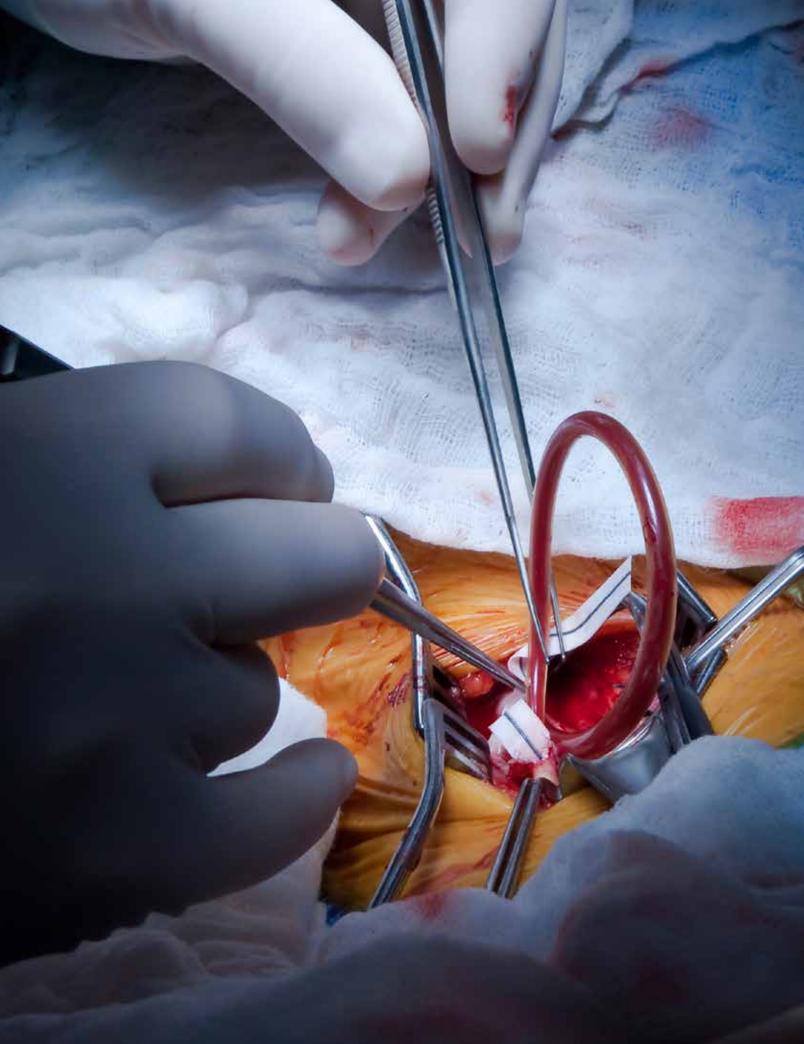


That is 30.000 opportunities to advertise yourself to potential employers, all for free!



Submit your resume and cover letter (optional) to publications@ast.org to be listed for three consecutive months in the AST Journal's Classifieds.

Did you also know that you can submit and post your resume on our Career Center page on the AST website? Just visit www.ast.org and click on Career Center. There you can create an account and post your resume for all to see! This is a free service. It only takes a few minutes to create an account to apply for jobs. Sign up today for access to all the great features on AST Career Center!



Carotid Endarterectomy

CIERRA TURNER, CST

The American Stroke Association estimates that 795,000 Americans suffer from new or recurrent stroke each year, and one out of every 18 deaths is a result of a stroke. This makes stroke the fourth leading cause of death in the United States. Carotid endarterectomy (CEA) is indicated to prevent stroke when a patient has carotid artery disease. Carotid endarterectomy is the surgical removal of plague from the carotid artery.

ANATOMY/PHYSIOLOGY

There are two carotid arteries located on either side of the neck. Each artery branches into two main vessels, the internal and external carotid arteries, at the carotid bulb. The internal carotid artery supplies blood to the brain. The external carotid artery supplies blood to the face and neck. Carotid artery disease results in decreased blood flow through these arteries.

PATHOPHYSIOLOGY OF THE DISORDER

Carotid artery atherosclerosis is a buildup of plaque in the inside of the arteries causing hardening and narrowing of these vessels. Plaque is composed of fat, cholesterol, calcium and other components and is a sticky substance that can adhere to the artery walls. The accumulation of plaque in the artery over time narrows the lumen of the artery and decreases blood flow. This is referred to as stenosis. Often there are no symptoms as a result of carotid artery stenosis. However, it can lead to transient ischemic attack (TIA) or cerebrovascular accident (CVA), more commonly known as stroke. A TIA often is referred to as a mini

LEARNING OBJECTIVES

- Learn about carotid endarterectomy and why it's the fourth leading cause of death in the United States
- Review the anatomy of the carotid arteries and the roles they play
- Examine the diagnostic interventions and treatment options for this condition
- Recall the procedural steps for a carotid endarterectomy
- ▲ List the post-operative complications following this procedure

Supplies and Equipment

Laparotomy pack containing a mayo cover, adhesive trash bag, laparotomy drapes, four utility drapes and two gowns

Half drape

Antimicrobial incision drape

Gloves

Sterile towels

Basins-large basin, two kidney basins, graduate

Bulb irrigator

30cc syringe

10cc syringe

18 and 22 gauge needle

0-tips

16 French red rubber catheter

Two umbilical tapes

Needle counter

Electrosurgical unit (ESU)

Electrosurgical unit (ESU) handpiece

Sequential Compression Devices (SCD)

Suction tubing

Yankauer and Frazier suction tips

Dressings

1 and 2-0 silk ties

4-0 Polyglactin 910 on a PS-2 needle

2-0 Polylecaprone on a SH needle

Four pack double armed 7-0 polypropylene on a BV-1 needle

Two double armed 5-0 polypropylene on a BV-1 needle

Peripheral vascular instrument tray

Delicate vascular instrument tray

Sequential Compression Devices (SCD)

Suction canisters

stroke, as it is caused by temporary blockage of blood flow to the brain. TIA's usually have rapid onset of symptoms that last less than 24 hours. A stroke also results from the blockage of blood flow to the brain; however, a stroke that lasts more than 24 hours can cause permanent damage. Since both TIA and stroke result from blood flow to the brain being obstructed, they have similar symptoms. Symptoms of TIA or stroke include: weakness or numbness in an arm or leg or both, difficulty speaking, facial drooping, vision problems, paralysis affecting one side of the body, sudden dizziness or confusion, memory problems and severe headache.

DIAGNOSTIC INTERVENTIONS

If carotid artery disease is suspected, a patient's medical history is taken and a physical examination is performed. An ultrasound of the carotid arteries, also called the carotid duplex, is the first diagnostic test performed. It uses high

frequency sound waves to assess blood flow through the vessels. If the ultrasound shows decreased blood flow due to significant stenosis, a computerized tomography (CT) angiography is performed to confirm the diagnosis. This is done by injecting contrast dye into a blood vessel. As the

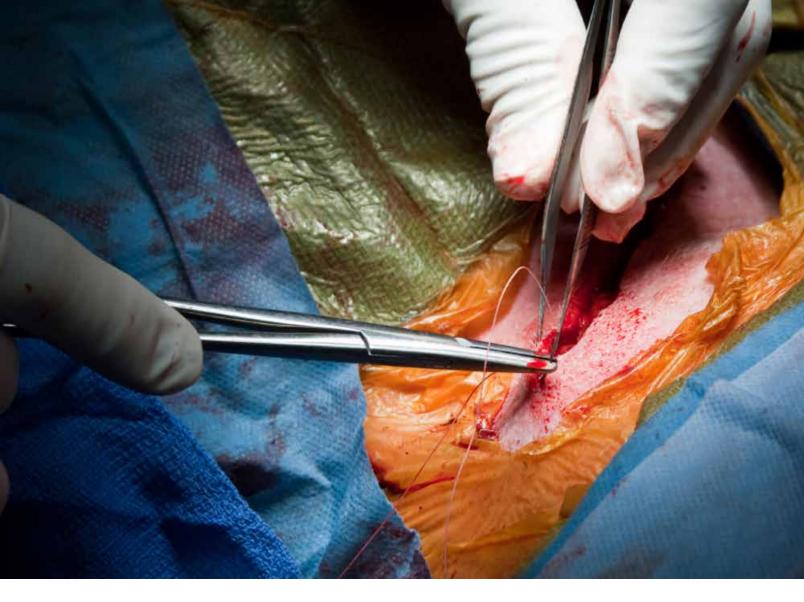
dye flows though the carotid artery, the CT scan provides images showing different views of the vessels of the neck and brain. This diagnostic test can confirm if a patient has carotid artery disease and further evaluate the severity of the disease including whether the patient needs to undergo surgical intervention.

TREATMENT OPTIONS

Depending on the severity of the disease, there are multiple treatment options. Lifestyle changes are indicated if any degree carotid artery disease is present. These include eating a healthy low-fat diet, exercising, maintaining a healthy weight and tobacco cessation. In addition, to these lifestyle measures, if a patient's blood pressure is elevated (less than 140/90), medications should be used to treat hypertension. Medications may be needed to aggressively treat hyperlipidemia and diabetes. Platelet agents such as aspirin also may be prescribed. For severe carotid artery disease, additional treatment options are carotid angioplasty and stenting or carotid endarterectomy. According to the guidelines established by the Society of Vascular Surgery, CEA, or carotid stenting, is indicated for symptomatic carotid stenosis less than 50% and asymptomatic stenosis of less than 60%. During carotid angioplasty and stenting, a balloon will be inserted through the neck or groin and be advanced into the carotid artery. A balloon will be used to expand the artery and then a stent will be placed to hold the artery open. During a carotid endarterectomy, an incision is made in the neck, the carotid artery is isolated and the vessel is opened. Placement of a temporary shunt is used to maintain adequate blood flow to the brain, while the plaque is removed. The shunt is then removed and the carotid artery is closed using a bovine pericardial patch, which restores blood flow.

SETUP

The surgical technologist ensures that all supplies and equipment are available for the procedure. A laparotomy pack is opened on the back table, and other basic packs also can be used. A basin is opened onto a ring stand and all necessary sterile supplies are opened into the basin. The surgical technologist then performs scrub and dons a sterile gown and gloves. The instrument trays are opened by the circulating nurse. Once the surgical technologist checks the indicators and removes the instruments, the tray is checked to ensure no moisture is in the bottom. Next, the Mayo stand is draped and the surgical technologist organizes the back table and



Carotid artery atherosclerosis is a buildup of plaque in the inside of the arteries causing hardening and narrowing of these vessels. Plaque is composed of fat, cholesterol, calcium and other components and is a sticky substance that can adhere to the artery walls. The accumulation of plaque in the artery over time narrows the lumen of the artery and decreases blood flow.

all sterile supplies. The circulating nurse dispenses medications including a combination of heparinized saline, antibiotic solution and lidocaine hydrochloride, while verbalizing the name, concentration and expiration date. The surgical technologist labels each container accordingly. A preoperative count is performed by the surgical technologist and the circulating nurse with each confirming aloud the count.

PREOPERATIVE PREPARATION

After the OR is prepared, the patient is brought into the operating room with the anesthesia care provider and the circulating nurse. The patient is assisted in moving to the operating table. Sequential compression devices (SCDs) are placed on the patient's legs to prevent blood clots. Routine monitors are placed as well as a cerebral oximeter to monitor the blood flow to the patient's brain during surgery. The patient is given general anesthesia and intubated by the anesthesia care provider. The anesthesia staff places an arte-

rial line to continuously and accurately monitor blood pressure. The circulating nurse places a Foley catheter to monitor urine output and empty the patient's bladder during the procedure. The patient is placed in the supine position with the head turned slightly away from the affected side. The patient's arms are wrapped in gel pads to protect the ulnar nerve, and his or her arms are secured at his or her side. A safety strap is placed approximately two inches above the patient's knees and a warming blanket is placed on the patient. The circulating nurse then begins the surgical skin prep. For this case, an alcohol-based skin prep is used.

DRAPING AND CREATING THE STERILE FIELD

After scrub, the surgical assistant may help in drape the patient. Four utility drapes are placed, ensuring that the landmarks of the chin and ear lobe on the affected side are exposed. An antimicrobial incision drape is placed over the area. A half drape is placed on the lower half of the patient, and a laparotomy drape is placed exposing the surgical site. The laparotomy drape is attached to two IV poles on either side of the patient's head. Light handles are positioned onto the surgical lights. The electrosurgical unit (ESU) and suction are secured to the drapes and one end is passed off the bottom of the patient to the circulating nurse. The Mayo stand and back table is moved into position. The surgeon enters the operating room and the circulating nurse initiates the time out.

CAROTID ENDARTERECTOMY PROCEDURE

After performing scrub and donning a gown and gloves, the surgeon notes the landmarks of earlobe and chin and feels for a pulse to ensure the incision is made in the correct location. A vertical incision is made using a #10 blade on a #3 knife handle. The subcutaneous tissue is dissected using the ESU device, and a Weitlaner self-retaining retractor is placed. Metzenbaum scissors and Debakey forceps are used to dissect the soft tissue exposing the carotid artery and its bifurcation. A Henley self-retaining retractor is also placed to assist in holding the exposure. A right angle is used to pass umbilical tapes around the artery isolating the external, internal and common carotid arteries. The carotid bulb is injected with 1% lidocaine hydrochloride, which affects the carotid baroreceptor and prevents reflex sympathetic bradycardia. Heparin sodium is given for systemic anticoagulation based on the patient's weight. After the heparin is given, the surgeon waits three minutes before clamping the arterAfter performing scrub and donning a gown and gloves, the surgeon notes the landmarks of earlobe and chin and feels for a pulse to ensure the incision is made in the correct location.

ies. The internal, external and common carotids are clamped with vascular clamps and two angled Debakey clamps. The internal carotid artery is opened with a #11 blade on a #7 knife handle, and the incision is extended using a 45-degree Potts scissor. An intravascular shunt is placed in the common carotid and internal carotid to ensure blood flow to the brain while the artery is clamped and the plaque is removed. The location of the shunt in the vessel is marked via a silk tie placed around the shunt. The plaque is removed using a Freer elevator. The arterial wall is irrigated with a heparinized saline solution. Mills articulating forceps are used to remove pieces of plaque from the arterial wall, and the area is swept with a wet Q-tip to remove any free pieces of plaque. A 7-0 polypropylene suture on a BV-1 needle is used to tack open the vessel ensuring the edges of the vessel do not curl. This allows the surgeon to properly align the patch to close the vessel. The vessel is closed using a 1-6 cm bovine pericardial patch cut to size and a 5-0 polypropylene suture on a BV-1 needle. The shunt is removed when the vessel is almost closed and the carotid arteries are allowed to back-bleed removing any air from the vessel. The vessel is closed and the suture is tied down, and half of the dose of heparin is reversed with protamine sulfate. Absorbable oxidized regenerated cellulose is placed over the artery and a sponge is packed into the incision to provide pressure. The sponge is removed and the surgeon checks to ensure that hemostasis has been reached. Closure begins and the surgical technologist and circulating nurse perform counts. The platysma muscle and subcutaneous layer are closed using a 2-0 poliglecaprone suture on an SH needle. The skin is closed, using a 4-0 polyglactin 910 suture on a PS-2 needle. Once the incision is closed a sterile dressing is placed and

the drapes are removed. The patient is awakened from anesthesia and extubated.

POSTOPERATIVE

The main postoperative complication of CEA is stroke. Once the patient is awake, he or she is checked to ensure there is no drooping of the face and they have no weakness on either side of the body, which may be signs of a stroke. The occurrence rate ranges form from less than 0.25% to more than 3%. A heart attack also is a potential complication and occurs in approximately 0.3% of patients. Nerve damage also can occur, that in most cases results in difficulty swallowing or speaking and often resolves over time. As with any surgery, bleeding and infection can occur.

Controlling the patient's blood pressure postoperatively is very important. A hypertensive patient is at a greater risk for bleeding and a hypotensive patient is a risk for cerebral ischemia. Unless complications occur, the post-operative recovery is generally quick. Patients typically stay in the hospital for one to two days and often can ambulate on the same day as the surgery.

ABOUT THE AUTHOR



Cierra Turner, CST, is a 2011 graduate of Conemaugh Valley Memorial Hospital's Program for surgical technology. Since graduation she has worked primarily in cardiovascular and thoracic surgery. She is currently pursuing further education to become a Physician Assistant.

REFERENCES

- 1. Carotid artery disease. Mayo Clinic. Accessed March 2013. http://www. mayoclinic.org/diseases-conditions/carotid-artery-disease/basics/definition/con-20030206
- 2. Carotid artery disease. Mayo Clinic. Accessed March 2013. http://www. mayoclinic.org/diseases-conditions/carotid-artery-disease/care-atmayo-clinic/treatment/con-20030206
- 3. Carotid endarterectomy. Encyclopedia of Surgery. Accessed March 2013. http://www.surgeryencyclopedia.com/A-Ce/Carotid-Endarterectomy.

- 4. Carotid Endarterectomy. UC San Francisco Department of Surgery. (2013). Accessed March 2013. http://surgery.ucsf.edu/conditions--procedures/carotid-endarterectomy.aspx
- 5. Carotid Endarterectomy for TIA and Stroke. WebMD. (2013) Accessed March 2013. http://www.webmd.com/stroke/carotid-endarterectomyfor-tia-and-stroke
- 6. Carotid stenosis (carotid artery disease). Mayfield Clinic. (2013) Accessed March 2013. http://www.mayfieldclinic.com/PE-CarotidStenosis. htm#.U-Z-SkDD9Ms
- 7. Clermont, G; Theodore, A. Arterial catheterization techniques for invasive monitoring. UpToDate, Inc. Wolters Kluwer Health. (2013) Accessed March 2013. http://www.uptodate.com/contents/arterial-catheterizationtechniques-for-invasive-monitoring
- 8. Haqqani, O. Carotid endarterectomy technique. Medscape. (2012) Accessed March 2013. http://emedicine.medscape.com/article/1895291-
- 9. Heart Health Center. WebMD. (2013) Accessed March 2013. http://www. webmd.com/heart/picture-of-the-carotid-artery
- 10. Hobson, RW, et al. Management of atherosclerotic carotid artery disease: clinical practice guidelines of the Society for Vascular Surgery. J Vasc Surg. (2008) 48(2):480-6. Accessed March 2013. http://www.ncbi.nlm.nih.gov/ pubmed/18644494
- 11. Impact of Stroke (Stroke statistics). American Hearth Association. Accessed March 2013. http://www.strokeassociation.org/STROKEORG/ AboutStroke/Impact-of-Stroke_UCM_310728_Article.jsp
- 12. Mohler III, E; Fairman, R; Carotid endarterectomy. UpToDate, Inc. Wolters Kluwer Health. (2013) Available from: http://www.uptodate.com/contents/carotid-endarterectomy
- 13. Milne, P. Carotid Endarterectomy. Melbourne Vascular Surgery Unit. Accessed March 2013. http://www.pymilne.com.au/CarotidEndarterectomv.htm
- 14. TIA (Transient Ischemic Attack). American Heart Association. Accessed March 2013http://www.strokeassociation.org/STROKEORG/ AboutStroke/TypesofStroke/TIA/TIA-Transient-Ischemic-Attack_ UCM_310942_Article.jsp