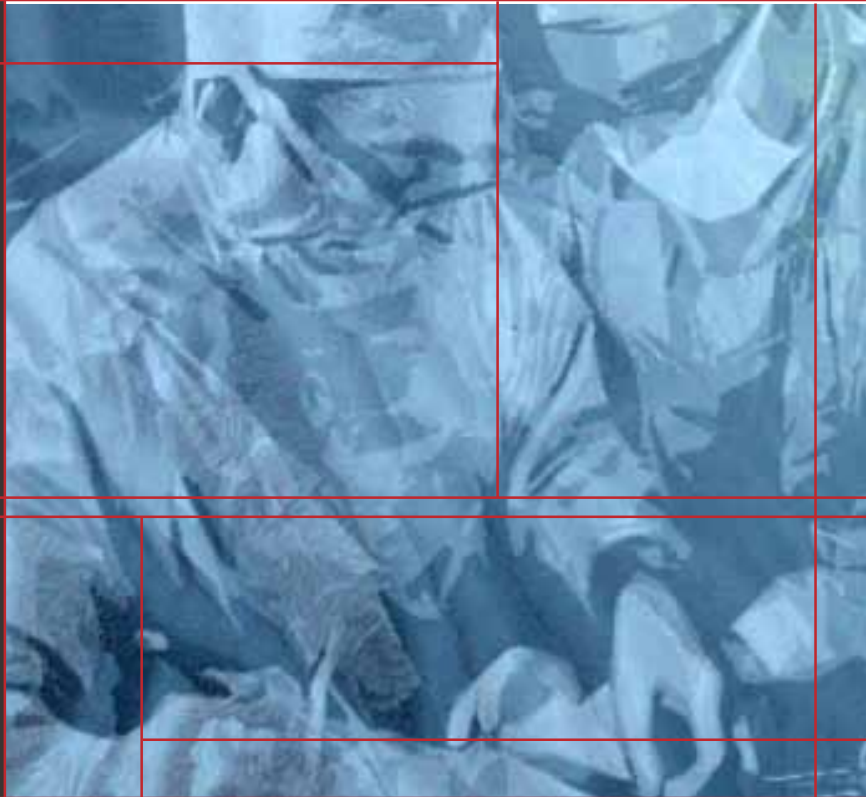




CardioVISION™

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WINTER 2011



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The mission of *CardioVISION™* is to provide a means of communicating pertinent information among practitioners of the specialty and among related professionals in the medical field and industry. *CardioVISION™* is a peer-reviewed quarterly journal that includes articles on practice issues, credentialing issues, educational opportunities, and more. *CardioVISION™* also includes classified job ads and industry advertisements.

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FROM THE PRESIDENT'S DESK

By Jonathan Sobel, PA-C, FAPACVS



It is with great pleasure, that I have the honor and privilege of welcoming you, our members, colleagues, and guests to beautiful San Diego for the 30th Annual Meeting of the Association!

It's hard to believe that it has been five years since we heard from Dr. Denton Cooley during the celebration of our 25th Anniversary in Chicago. We are so fortunate that another great pioneer in Cardiovascular Surgery has accepted our invitation for this special occasion. Dr. Robert Guyton, Chief of Cardiovascular Surgery at Emory University School of Medicine and Chief of Cardiothoracic Surgery at Emory University Hospital in Atlanta, Georgia will be our guest. Dr. Guyton, who is the Distinguished Charles Ross Hatcher, Jr., Professor of Surgery and a former President of the STS will be delivering the keynote address during our 30th Anniversary Dinner on Friday evening.

Our CME committee chaired by Steven Gottesfeld, PA-C, has the immense responsibility of planning our educational meetings. The committee has put together a wonderful program and has dedicated the entire day on Friday to the field of General Thoracic Surgery. Our first speaker of the day is a pioneer in his own right, and we are pleased to welcome Douglas J Mathisen, MD, Chief of Cardiothoracic Surgery at Massachusetts General Hospital, Hermes C. Grillo Professor of Thoracic Surgery, Department of Surgery, Harvard Medical School. Dr. Mathisen, who is the current President of the STS, and an expert in airway surgery, will be speaking to us on the surgical management of tracheal disease.

For those not familiar with the APACVS, former President D. Gregg Munson described it well during his tenure as organizational historian.

The Association of Physician Assistants in Cardiovascular Surgery (APACVS) was formed in 1981, to provide a forum for PAs working or participating in research in the disciplines of cardiac, thoracic and vascular surgery. Since its inception, the association has been recognized as the voice of cardiac surgery PAs not only by other professional peer organizations but notably as well by the AATS and STS.

Early on, the stated purpose of the association was to provide continuing medical education for its members. To this end the association presents two educational meetings yearly, one in the winter just prior to the STS, and the other in the summer. As the profession became stronger, the APACVS has taken a more prominent role in the affairs of all specialty PAs particularly regarding the matters of professional recertification. In addition, a strong relationship with the STS has developed to the point that the respective governing bodies of both organizations meet yearly to discuss matters of mutual concern.

While much has changed since its beginning, the association still exists to support the PA who works for the physician, and in whatever role, ultimately cares for the patient.

Change continues in the CME realm for 2011. Recognizing that a significant proportion of our members practice solely in the surgical critical care arena, and not in the OR, we have redesigned our offerings. Our annual Winter meeting will continue to offer the latest surgical topics in Cardiovascular and Thoracic Surgery. Our Summer meeting has been expanded to a four day footprint and will be focused entirely on the latest critical care topics. The dates for this first of its kind meeting are June 22-25th 2011 at the Gaylord National Resort on the Potomac in the Washington DC area.

APACVS has worked closely with the NCCPA over the last several years as the new Certificate of Added Qualification in Cardiovascular and Thoracic Surgery has been developed. We anticipate that our members will be quick to take advantage of this specialty recognition process and demonstrate their knowledge and accomplishment in their chosen field. In this regard, APACVS will be offering a Board Review course designed to prepare candidates for the specialty exam to be given in September. The review course will be taught as a two day alternate track on June 24th and 25th during the Summer meeting. Demand is expected to be high for this offering, and exam candidates are encouraged to register early.

We are also pleased to announce that for the first time, we are formally welcoming our nursing colleagues to our meetings. We have secured nursing CEU's for this meeting through the outstanding efforts of our Board Member Janeen Quatman. As an organization, we will seek to opportunities to expand interprofessional education and collaboration.


As was the case with our Ft. Lauderdale meeting last winter that featured our expert panel discussion on Endoscopic Vessel Harvesting, we will once again be webcasting this meeting. The entire meeting will be made available electronically to attendees as part of their registration and will include all lectures, questions and answer periods, and our keynote address. So sit back, listen and learn without worrying about missing anything. It will all be there for you to review. For those who can't attend this year, we will be applying for enduring material CME credit and will offer this option as it becomes available.

I look forward to seeing old and new friends, and networking with colleagues from across the nation at our Opening Reception on Thursday night, our Anniversary Dinner on Friday, and our Social Event on Saturday evening. I hope that you enjoy your visit to San Diego, and truly benefit from the excellent educational program that has been assembled.



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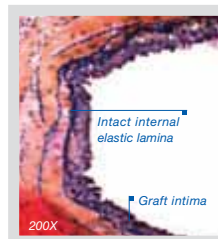
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AT LAST: NCCPA'S SPECIALTY CREDENTIAL FOR CVT SURGERY PAs IS HERE

Janet J. Lathrop, MBA

President/CEO, National Commission on Certification of Physician Assistants



This year brings a new opportunity for PAs practicing in cardiovascular and thoracic surgery: the chance to achieve recognition for your work and expertise through NCCPA's new Certificate of Added Qualifications (CAQ) program. This is a particularly exciting time bringing to fruition decades of discussion about whether and how to recognize the qualifications of PA specialists, discussions in which CVT surgery PAs have been key participants.

While we're excited to share this process with you, it's been a long and winding road. Even since my last *CardioVISION™* article one year ago, the specialty program has changed substantially. Since then, we finalized the specialty-specific requirements, taking in feedback from specialty leaders and raising the rigor of the CME requirement while building in a significant—but we feel appropriate—degree of flexibility in the procedures area. But most importantly, we dropped the “specialty certification” label in favor of the CAQ concept, responding to evidence that the certification label itself may have been enough to trigger compulsory participation in the program for PAs in many hospital settings. As our CAQ program is voluntary, we gladly made that change.

Also, we have worked diligently to keep the cost of this program low. As you are probably aware, surgeons pay thousands of dollars to earn board certification. We are offering our CAQ for just \$350, paid as a \$100 registration fee when you begin the process and a \$250 exam fee when you apply for the test.

Over the years, the CVT surgery PAs have been the most persistent in their petitioning for a specialty program. *Now that the program is launched, the decision to participate is up to you.* Registration for the CAQ program is open, and applications for the exam will be available beginning in February. I think many of you will find that you've already satisfied most of the requirements and are ready for the exam. Here are the details...

Physician assistants seeking the Cardiovascular/Thoracic Surgery CAQ must also first satisfy two basic pre-requisites: (1) current PA-C certification and (2) possession of a valid, unrestricted license to practice as a PA in every state in which you're licensed. Or—if you work for a federal agency—you must have unrestricted privileges to practice as a PA. Then, there are three core requirements prior to the exam.

Physician assistants seeking the Cardiovascular/Thoracic Surgery CAQ must also first satisfy two basic pre-requisites: (1) current PA-C certification and (2) possession of a valid, unrestricted license to practice as a PA in every state in which you're licensed. Or—if you work for a federal agency—you must have unrestricted privileges to practice as a PA. Then, there are three core requirements prior to the exam.

CME

In the six years before you apply for the specialty exam, you must earn 150 hours of Category I CME focused on cardiovascular/thoracic surgery practice, including 50 hours earned within the two years prior to taking the exam. Also, those 150 hours must include completion of an Advanced Cardiac Life Support course. On a very positive note, the same 150 hours **may also be used** for maintenance of your PA-C credential, so you can apply hours you've already logged with NCCPA toward your CAQ.

The cardiovascular/thoracic surgery leaders who provided input during the development of the CAQ requirements believed that your CME activities should encompass knowledge of post-op critical care management and knowledge of surgical management of coronary artery disease, congenital heart disease, thoracic disease, and central and peripheral vascular disease. We have made those recommendations, though, not requirements, recognizing that PA practice—even within the specialty of CVT surgery—takes different forms.

Experience

You must have at least 4,000 hours of experience (the equivalent of two years of full-time practice) working as a PA in cardiovascular/thoracic surgery to qualify for the CAQ; and like the CME, you could have earned your CVT surgery experience anytime during the last six years.

Procedures/Patient Case Requirement

This was the most difficult of the requirements to determine, given the wide range of roles that PAs fulfill in specialty practice. In this area, you must be able to apply the appropriate knowledge and skills needed for practice in the specialty. Ultimately, this is where we decided to involve your physician partner. You must provide an attestation from a physician

Continued on page 8

At Last: NCCPA's Specialty Credential for CVT Surgery PAs is Here continued...

who works in the specialty and is familiar with your practice and experience. The physician attestation must indicate that you have performed the procedures and patient management relevant to your practice setting and/or understand how and when the procedures should be performed.

You can find a list of the specialty procedures and patient cases that should be considered when determining whether you can satisfy this requirement on our Web site at <http://www.nccpa.net/Cardiothoracicsurgery.aspx>.

The Cardiovascular/Thoracic Surgery CAQ Exam

After you've satisfied all other requirements for the CAQ, you will be eligible to apply for the specialty exam. The exam will include 120 multiple-choice questions based on what CVT surgery PAs told us about their practice when they completed our recent PA Practice Analysis survey. Like PANCE and PANRE, the CAQ exam will be administered at Pearson VUE testing centers; but unlike PANCE and PANRE, we've opted to offer it only one day a year to keep costs low. The first exam will be administered on September 12, 2011.

Maintaining the Cardiovascular/Thoracic Surgery CAQ

Once you've earned the CAQ, it will be valid for six years, and we've kept the maintenance process simple. To maintain the CAQ, you must maintain your PA-C certification, continue to meet the licensure requirements, earn and log at least 75 hours of CVT surgery Category I CME, and pass the Cardiovascular/Thoracic Surgery Specialty Exam before your CAQ expires. Plus, those same CME hours logged in support of your CAQ **may also be used** to satisfy the CME requirement for maintenance of PA-C certification.

Getting Started

Beginning the CAQ process is as simple as signing in to the NCCPA Web site, providing information about your license(s) or government privileges, paying a \$100 registration fee, and attesting that you have earned the required CME (if you have), and attesting that you have the required experience (if you do). The procedures/patient case requirement is the only one that requires an extra step, and even that is a simple process; you just have to print a form for your physician to sign and return to us. Then—starting next month—you can apply for the exam and be among the first PAs to achieve recognition through this new program.

To learn more about the CAQ program, read about it at <http://www.nccpa.net/Cardiothoracicsurgery.aspx>. Plus, don't hesitate to contact us via e-mail (nccpa@nccpa.net) or phone (678.417.8100) with questions you may have. **If you're ready to register**, you may do so as soon as you've satisfied one of the requirements. Just go online and get started! We encourage you to get the recognition you deserve for your experience and expertise in Cardiovascular/Thoracic Surgery.

AAPA PA/PHYSICIAN PARTNERS OF THE YEAR

Congratulations Dana! Dana R. Gray, PA-C, FAPACVS served as president of the APACVS and currently serves as APACVS representative to the AAPA House of Delegates.

APACVS would like to recognize Dana Gray and his supervising Physician, Jonathan Hill, MD for receiving the award from AAPA PA/Physician Partners of the Year!



APACVS MEMBERS ON MEDICAL MISSIONS

It was a busy year for several members of the cardiac team from the University of Wisconsin. Dr. Niloo Edwards Professor and Chairman of the Division of Cardiothoracic Surgery and Gene Kenny, PA-C, FAPACVS along with a full cardiac team including a cardiologist, pediatric intensivist, anesthesiologist, RNs and perfusionists were invited to Ethiopia in June. The team then went on a medical mission to the Dominican Republic in October.

In June 2010, the team was invited to the Cardiac Center of Ethiopia in Addis Ababa. Dr. Belay Abegaz of the Children's Heart Fund of Ethiopia started a pediatric heart hospital in early 2009. With help from individual contributors and support from Black Lion University and the Ethiopian government, Dr. Belay built a hospital with two operating rooms, a catheterization lab and an eight bed ICU. The facilities were excellent. Part of the mission was to involve and train the staff of technicians, RNs and

Continued on page 9

a perfusionist with pediatric cardiac operations and post-operative management. Most of the children had rheumatic disease and required valve replacements. The Ethiopian people, the staff and Dr. Belay were gracious hosts and although coordinating the transfer of equipment through customs was a challenge, the team is planning a return mission for June 2011.

In October, many of the same team members went to Santiago, Dominican Republic. Dr. Robert Pascotto, who is semi-retired from his cardiac surgery practice in Fort Myers, Florida created the medical mission to this hospital in 2002 and has assured that at least two and usually three “Heart to Heart” medical missions occur annually. Due to his diligence, the Jose Maria Cabral y Baez Hospital has made some significant strides toward building a consistent heart program. Currently, only the missions that he organizes perform heart surgeries at this hospital. Dr. Niloo Edwards has taken a cardiac team there for the past three years to perform operations on primarily adult patients suffering from the effects of rheumatic fever or coronary artery disease. This year two teams from the University of Wisconsin along with Dr. David D’Alessandro, a cardiac surgeon from Montefiore Hospital in New York and his physician assistant Jason Lightbody, PA-C joined the Wisconsin team to perform 10 operations during their week in Santiago, including 16 valve replacements, 5 CABG;s and an ascending aortic aneurysm repair. The team had the opportunity to work with medical students and residents to help them build their surgical skills and hopefully their confidence to bring their skills back to the Dominican Republic. The local physicians, residents and medical students frequently took team member over to their houses for dinner.

When describing his experience with the two medical missions he participated in during 2010, Gene notes: “Medical Missions serve many purposes. On the surface, we help a few patients with immediate surgical problems that simply would not get this care. We can sometimes build confidence in the medical students, residents and staff to continue the efforts of the mission to bring cardiac care to under-served areas of their world. Mostly however, we ourselves benefit. When we give of our time and energy and share our skills, we build friendships with others around the world.”

John noted: “It was very rewarding to be able to go on a trip like this and give back to so many people and families that otherwise would never have gotten their needed surgeries. It really makes you appreciate all that we have here in the states, especially in the face of a changing health care system. Many patients were required by the hospital to bring their own medications from an outside pharmacy and endotracheal tubes if they were having lung surgery. Every family we met was overwhelmingly grateful for our help. I look forward to going back next year and in the years to come”.



Niloo Edwards, MD (center), & Gene Kenny, PA-C (right) making daily rounds



Gene Kenny, PA-C, FAPACVS



Medical Team in Dominican Republic



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David D’Alessandro, MD with Jason Lightbody, PA-C



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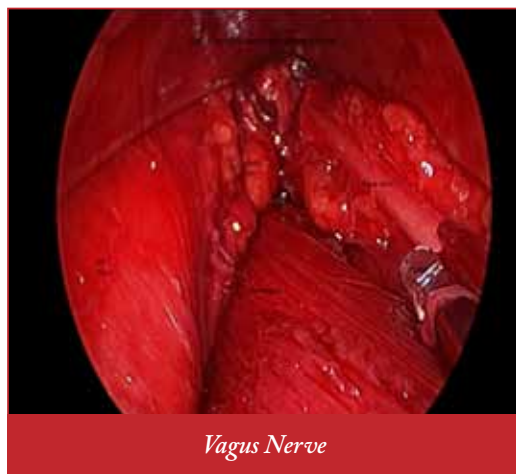
ENDOSCOPIC-ASSISTED TRANSHIATAL ESOPHAGECTOMY, A NEW DIMENSION ON ESOPHAGECTOMY CASE

*Michael D. Arizola PA-C, Melissa Dabnert PA-C,
Julie Desai PA-C, William Tisol M.D.*

A 44 y/o Native American male with a past medical history of obesity, hepatitis C, seizure disorder, alcohol abuse and COPD presented to his PCP with complaints of fatigue and weakness. The patient denied dysphagia, reflux, hemoptysis, hematemesis, weight loss, abdominal pain, shortness of breath, chest pain, fevers, chills, night sweats, headaches, bone pains, or visual changes. He also denied hypertension, diabetes, congestive heart failure, cirrhosis or portal hypertension. He was an active drinker (6 beers/day) and smoker with a 35 pack year history. He denied current illicit drug use, but had a remote history of marijuana and LSD use. His family history was noncontributory. He had no known allergies. His medications included Folic acid, hydrocodone 5/500mg, iron, lasix, multivitamin daily, omeprazol, phenytoin, pregabalin, propranolol, spironolactone and thiamine. On examination he was noted to be pale. Work up revealed anemia with a hemoglobin of 4 g/dL. He was admitted to the ICU at an Outside Hospital, where he was stabilized and received multiple transfusions to correct his hemoglobin and hematocrit. Once stabilized, he underwent a colonoscopy and esophagogastroduodenoscopy (EGD). They revealed no acute bleeding. However the EGD did show alcoholic cirrhosis and esophageal varices, which were banded. A month later, he underwent a follow-up EGD and endoscopic ultrasound that revealed a 1.5cm sub-mucosal nodule in the distal esophagus and antrum. Biopsy was positive for adenocarcinoma of the esophagus. The patient was referred to thoracic surgery for surgical evaluation.



Our evaluation revealed the patient was in no acute distress. He was afebrile with normal vital signs. Examination of his heart and lungs was normal. Abdomen was obese, soft, non-tender, non-distended with bowel sounds noted. He had a palpable nodular liver. No splenomegaly or evidence of ascites. Extremities had trace edema. All other physical exam findings were unremarkable. Laboratory results revealed normal electrolytes, BUN and creatinine; WBC 4.7, hemoglobin 14 g/dL, hematocrit 41%, platelet count 35k, ALT 36 IU/L, AST 111 IU/L, alkaline phosphatase 271 IU/L, total bilirubin 5.1, direct bilirubin 2.0 and albumin 3.6. CT scan revealed extensive varices around the esophagus and upper abdomen but no obvious mass in the esophageal or gastric region. PET scan revealed intense uptake, measuring 4.5 SUVs, at the posterior wall of the GE junction, approximately 1.5cm in diameter. There were mildly enlarged periceliac to right retro-crural lymph nodes that had no FDG accumulation, which suggested no metastatic involvement. Additionally there was evidence of perisplenic varices, some splenorenal shunting and the liver was lobulated, consistent with cirrhosis and portal hypertension. Based on these findings, he was staged at a T1 N0 M0 and surgical resection was offered to the patient. The patient wished to proceed with a transhiatal esophagectomy. Because he was at increased surgical risk for bleeding due to his varices and cirrhosis, a trans-intrahepatic portal shunt (TIPS) procedure was performed fourteen days preoperatively. The patient was then admitted the day before surgery and received platelet transfusion. Post transfusion platelet count was 76K and he also received multiple platelet transfusions intraoperatively.



Procedure

The patient presented to the operating room for a trans-hiatal esophagectomy. He was positioned with the neck turned to his right shoulder. Great care was taken to position the neck without over extending it. The neck and abdomen were prepped and draped in normal fashion. The stomach was first mobilized and dissected up to the hiatus via a midline abdominal incision. Simultaneously, the left neck was opened just anterior to the sternocleidomastoid muscle. The sternocleidomastoid muscle, left jugular vein, and left carotid artery were reflected laterally in order to access the trachea and the esophagus medially. The esophagus was mobilized circumferentially and then isolated with a Penrose drain for retraction. Great care was taken to preserve the left recurrent laryngeal nerve, which was visualized. All dissection was done sharply with scissors. It is important to keep the field hemostatic. This allows for good visualization of the anatomical landmarks. The neck was exposed using a Weitlander retractor during the esophageal dissection. No bipolar

Continued on page 12

Endoscopic-assisted Transhiatal Esophagectomy, A new dimension on Esophagectomy Case continued...

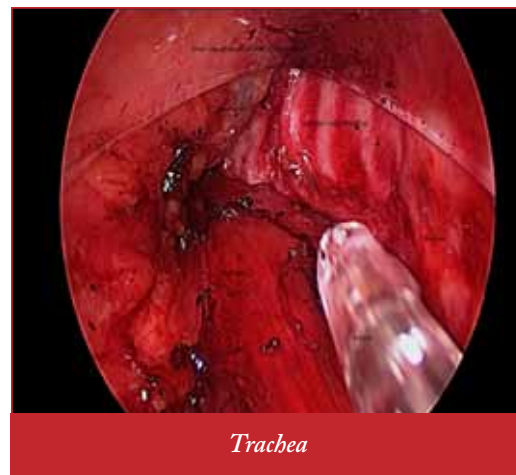
or cautery was used due to the location of the left recurrent laryngeal nerve. An endoscopic dissecting instrument with an open (non-pressurized) carbon dioxide infusion (ClearGlide, Endoscopic Vessel Harvesting, Sorin, Italy) was utilized to mobilize the esophagus with endoscopic visual assistance. The spoon shaped dissector was utilized to create the tunnel and for all the dissection. A 30 degree scope was used for visualization. The anterior dissection and introduction of the ClearGlide spoon allows the technician to work in a downward fashion with the 30 degree scope. This provided visualization of the upper thoracic esophagus, including the recurrent laryngeal nerves, thoracic duct, aorta, azygos vein and the takeoff of the left main stem bronchus. An endoscopic peanut was used to develop the plains and a standard endoscopic bipolar cautery was used to divide branch vessels of the esophagus. The distal esophageal tunnel (Hiatus) was kept intact until all the dissection was completed to help with visibility with the carbon dioxide tunnel. The carbon dioxide flow rate was set at 4-5 liters/min. The esophagus was dissected in plains starting with the anterior aspect working our way around the esophagus. The Penrose was used for retraction and to provide multiple angles for dissection. A hemostat was used to secure the Penrose. A retractable (circular) liver retractor was used to make sure the esophagus was mobilized from the hiatus to the neck. An endoscopic lymph node biopsy was done with the ClearGlide at this time for staging. The lymph nodes were biopsied with endoscopic biopsy cup forceps. The transthoracic and trans-abdominal dissection plains were then connected to complete the esophageal mobilization. The esophagus was then divided and the gastric pouch was brought up through the neck. The gastro-esophageal anastomosis was completed in a stapled fashion. A pyloroplasty and feeding jejunostomy completed the operation.

Outcome

The patient was taken to the ICU overnight. Post-operatively he had no evidence of vocal cord injury or pneumonia. Seventy-two hours post-operatively he experienced alcohol withdrawal syndrome. After utilization of the Clinical Institute for Withdrawal Assessment (CIWA) a treatment protocol was successfully utilized to control the withdrawal. On post-op day 7, his barium esophagram showed no evidence of anastomotic leak. He was discharged home on POD#10 on a mechanical soft post-gastrectomy diet. Pathology revealed that the proximal margins of the esophagus and distal stomach margin were negative for carcinoma. The specimen of the stomach and esophagus was positive for moderately differentiated adenocarcinoma.

Discussion

Cancer of the esophagus is a relatively uncommon but extremely lethal malignancy. ⁽¹⁾ In 2009, the diagnosis was made in 16,470 Americans and led to 14,530 deaths. ⁽²⁾ In the United States, esophageal cancer cases are either squamous cell carcinomas or adenocarcinomas. ⁽¹⁾ The incidence of squamous cell esophageal cancer has decreased somewhat in both the black and white population in the United States over the past 30 years, while the rate of adenocarcinoma has risen dramatically, particularly in white males. ⁽¹⁾ Esophageal cancer occurs mostly during



the fifth to seventh decades of life and is more common in men than in women. ⁽³⁾ The most common contributing factors for squamous cell carcinoma are cigarette smoking and chronic alcohol exposure. ⁽³⁾ Adenocarcinomas arise in the distal esophagus in the presence of chronic gastric reflux and gastric metaplasia of the epithelium (Barrett's esophagus), which is more common in obese persons. ⁽¹⁾ Progressive dysphagia and weight loss of short duration are the initial symptoms in the vast majority of patients. ⁽¹⁾ EGD allows direct visualization and biopsies of the tumor. ⁽³⁾ CT scans of the chest and abdomen and PET scans are useful to detect distant organ metastases and invasion of structures next to the esophagus. ⁽³⁾ Endoscopic ultrasound is the most sensitive test to determine the penetration of the tumor, the presence of enlarged peri-esophageal lymph nodes, and invasion of structures next to the esophagus. ⁽³⁾ Patients with esophageal cancer are considered candidates for esophageal resection if the following criteria are met: 1) there is no evidence of direct invasion of the tumor into adjacent structures of the esophagus such as the tracheobronchial tree, the aorta, or the recurrent laryngeal nerve; 2) there is no evidence of distant metastases; 3) the patient is fit from a cardiac and respiratory point of view. ⁽³⁾

Traditional esophageal cancer surgery has been performed using transthoracic esophagectomy (TTE) and transhiatal esophagectomy (THE) approaches. Both of these approaches have been most invasive and associated with high morbidity and mortality and long recovery. ⁽⁴⁾ ⁽⁵⁾ The TTE approach has been associated with high complications, mostly pulmonary. THE approach involves a great deal of blunt dissection, with reported complications that included massive bleeding as well as tracheal, azygos vein, aortic, recurrent laryngeal nerve and thoracic duct injuries, and cardiac arrhythmias. ⁽⁵⁾ ⁽⁶⁾ Mediastinal lymph node dissection has been difficult to perform. ⁽⁶⁾ ⁽⁷⁾ Based on the continued high complication rates, there has become a need for a less invasive approach for the treatment of esophageal cancer. ⁽⁸⁾

Continued on page 13

Endoscopic-assisted Transhiatal Esophagectomy, A new dimension on Esophagectomy Case continued...

Cushieri, et al. first introduced thoracoscopic or laparoscopic approaches to esophagectomies, in 1998. Since then, there have been multiple “minimally invasive” techniques used to mobilize the esophagus. These techniques include laparoscopy, video-assisted thoracoscopy, robotic-assisted surgery and mediastinoscopy. Added benefits to minimally invasive esophagectomies may include decreased operative times, blood loss, ICU and hospital length of stays. ⁽⁸⁾

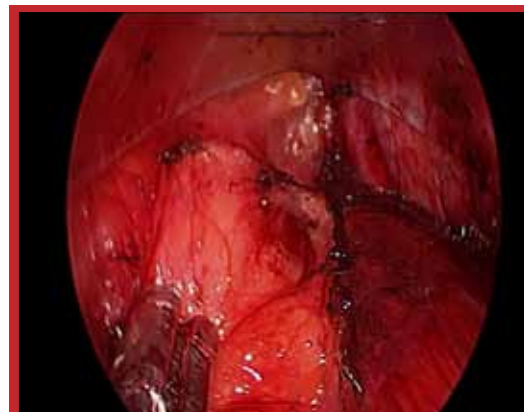
Endodissection of the thoracic esophagus has been accomplished using a variety of surgical techniques. Bumm et al describes an endodissector developed by Plank and Stotz in Germany. ⁽⁹⁾ This instrument provides a tissue dilatator, working channel, endo-camera and suctioning device. ⁽⁹⁾ Tangoku et al first reported using an earlier version of the equipment we utilize as a mediastinoscope. ⁽⁷⁾ ⁽¹⁰⁾ The device currently includes a working channel, access for a 30 degree endoscope and light source, bipolar cautery device, and a port for an open carbon dioxide insufflation system. This device is successfully used in endoscopic greater saphenous vein, radial artery, lesser saphenous vein, and sural nerve harvesting as well as subxyphoid pericardial windows. In addition, femoral to below the knee artery bypass have been performed using this device.

Summary

The application of this device for transhiatal esophagectomy is not regularly utilized in the United States. The device allows enhanced visualization of the esophagus, trachea, azygos vein, vagus nerve, recurrent laryngeal nerve, left mainstem bronchus, parietal pleural and mediastinal lymph nodes. The direct visualization may limit injuries to adjacent structures like the thoracic duct and decreased blood loss. It may also increase the number of paraesophageal lymph nodes harvested during the transhiatal esophagectomy. The Sorin ClearGlide system advantage to other systems is that it is an open system allowing the introduction of multiple instruments under the hood. The Sorin ClearGlide system is an open system that doesn't rely on a CO₂ for a tunnel and may reduce the incident of CO₂ embolus as seen with the closed systems on the market. This system allows for coaxial movement in the tunnel during dissection and allows an adequate lymph node dissection. The future of this technique may allow a robotic or laparoscopy approach in the abdominal portion of the surgery. This would be in line with the minimally invasive movement seen in today's medical arena. This technique would also allow a PA and physician team to expose the neck and abdominal sections simultaneously in a minimal invasive fashion. This technique has allowed the operative time to be reduced by 50% in most cases. In order to further assess the utility of this technique, we plan to follow additional patients and refine the existing technology.

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Pleural Left



Esophageal Lesion

CVT PAS IN THE NETHERLANDS

A few years ago, some PAs from the Netherlands attended one of the APACVS Annual Educational Meetings. Since that meeting, some of our members have inquired as to the current status of Pas in The Netherlands.

Fortunately, with the assistance of Nederlandse Associatie Physician Assistants (The Netherlands Association of Physician Assistants or NAPA), *CardioVISION™* has been able to correspond with a CVT PA in the Netherlands.

The PA concept was introduced in the Netherlands in 2000. It is closely aligned with the American PA model. In order for an individual to be admitted into the PA training Program, the individual must have proof of an advanced level of professional training (e.g. nursing, physiotherapy) and at least two years of relevant experience. During the Pas training, the PA gains a wide basic medical knowledge, in addition to specific medical competencies within the specialist area in which the PA will practice.

Following graduation, the PA shows proof of her/his competencies through a 'Quality Assurance Registry.' Readers interested in reviewing the specifics contained in the Registry are encouraged to visit napa.nl For readers not fluent in Dutch, NAPA is currently experimenting with an English translation of much of their website. If you appreciate these endeavors, I am certain they would appreciate hearing from you.

Since their humble beginning in 2000, the Netherlands PA community has currently grown to around 400 practicing PA's approximately 10% of which (40) currently practice in Cardiovascular Surgery. Their duties parallel those of their American counterparts:

- They perform histories & physical examinations.
- They order pre-operative labs, and write pre-operative orders.
- They first assist on valve surgery, aneurysms etc.
- They often open and close surgical incisions.
- They harvest the saphenous vein and/or radial artery for use in coronary arterial revascularization procedures.
- They provide postoperative care; not limited to, but including the removal of chest tubes, temporary epicardial pacemaker wires, etc.
- Some of the CVT PAs insert PICC lines in patients who will be requiring them.
- Some of the CVT PAs independently perform 'small' surgical procedures, such as an ICD change or removing sternal wires.
- Currently, the PAs do not have prescriptive privileges (although they are working on it) However, they will prepare the patients discharge prescriptions for a physician's signature.
- They see postoperative patients in the clinic; however, much like their American colleagues, their patients are generally returned to the care of their Cardiologist(s) approximately three weeks post-operatively and are then only seen by the CVT team should a specific need arise(e.g. evaluation of an incision, incisional pain, etc.)



Simone Kwant, PA-C



Simone Kwant, PA-C with patient



Simone Kwant, PA-C with classmates

CardioVISION™ would like to thank Netherlands CVT PA Simone Kwant for providing much of the information which we have provided in this brief overview of the CVT PA in The Netherlands. Despite her busy clinical schedule, while corresponding with us she has been organizing a PA conference for Netherlands PAs and is pregnant. Simone was kind enough to provide us with some pictures of her at work to accompany this article.

American CVT PA's are indeed encouraged to view the Netherlands PA site to see how individuals in other parts of the world are participating in and expanding our exciting profession.



Association of Physician Assistants in Cardiovascular Surgery

MEMBERSHIP APPLICATION

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