# THECHANNELSS A COOK NEWS PUBLICATION

FUSION

**ISSUE 1, 2006** 

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n the practice of ERCP, there has never been a better time to

experience

7ew

features

the power of FUSION. This revolutionary system – known for secure, continuous access and the option of using any wire guide length – has some exciting new features, designed with your practice in mind.

The Fusion 10 FR OASIS features stiffer construction for improved pushability, giving

you greater stability and control, especially when placing 10 FR stents through tight or torturous strictures. A reinforced IDE Port helps eliminate kinking. Reposition a stent prior to deployment or withdraw a stent completely while maintaining secure wire guide access. Plus, you can place multiple stents without ever losing access. All these maneuvers are smoother than ever with the new Fusion OASIS, which gives you the option of using a traditional long wire or today's newer short wire.

FUSION: NEW FEATURES Continued on page 13



# THE**CHANNEL**»



Cook Endoscopy has long understood that optimal patient care is your focus, and it continues to be our focus as well. That's why for more than twenty years we have assisted healthcare professionals in learning the latest in endoscopic GI technology and related disease information.

That tradition continues as Cook Endoscopy, in partnership with HealthStream (an accredited provider of continuing nursing education), now offers two new courses: "Endoscopic Polypectomy" and "Options for Enteral Feeding."

The courses are offered free of charge when presented by your Cook Endoscopy Sales Representative, and each course has a value of one contact hour. Please check with your state licensing board or agency regarding specific renewal requirements in the U.S.

Additional courses will be made available in 2006 including "Malignant Biliary Disease," "Biliary Stone Management," and "Primary Sclerosing Cholangitis (PSC)."

Please check with your sales representative for course availability and to discuss future presentation opportunities.



Dr D. Nageshwar Reddy, Dr GV Rao, Dr Sandeep Lakhtakia

The introduction of DASH DomeTip Sphincterotome (COOK<sup>®</sup> Endoscopy, Winston Salem, NC, USA) has eased another step for the success of therapeutic Endoscopic Retrograde Cholangio-pancreatography procedure. The DASH DomeTip sphincterotome effectively combines the utility of a regular sphincterotome for selective cannulation with the safety of all balltip catheter. The pre-curved tip allows selective cannulation of biliary system or pancreatic duct. The smooth dome at the tip, similar to the "ball" of balltip cannula, prevents any local trauma to the papilla – a major advantage over other sphincterotomes. Presently, the DASH DomeTip is available with or without a wire guide in the 0.025 inch DASH product line. The wire guides of 0.021 inch, 0.025 inch and 0.035 inch gauge Tracer Metro Direct are available in 260 cm and 480 cm length.

In situations of tight malignant strictures, the accompanying Tracer Metro Direct wire guide negotiates these narrow passages quite smoothly for access. The DASH DomeTip is



then pushed up and beyond the stricture/ stone with the access being maintained by simply locking the



Dr D. Nageshwar Reddy

Asian Institute of Gastroenterology 6-3-661, Somajiguda, Hyderabad -500 082, INDIA Phone: 91-40-23378888, 22310675, 55510072/73. Fax: 91-40-23324255 Email: aigindia@yahoo.co.in Dr. D. Nageshwar Reddy M.D., D.M., FAMS, FRCP Chief Gastroenterologist

wire in place at the hub. A selective chlangiogram or pancreatogram is obtained after deep cannulation over a wire guide without any exchange using the integrated hub for the injection and enhanced wire control, thus saving crucial procedure time of sedated/anesthetized patients. The accompanying sphincterotome with markings has the usual advantage of judging the depth of the cut.

After introduction of DASH DomeTip in our ERCP unit at Asian Institute of

Gastroenterology, Hyderabad, the frequency of accidental tissue injection (unlike those with standard/regular or tapered tip cannula) has significantly reduced, even among the training fellows. Also the inflammation and edema at papilla during the procedure is much less, leading to the early observation of reduced frequency of post-ERCP pancreatitis.



**Compressive Extension (mm)** 

Graph of Compressive Load vs. Extension for Lubricated Catheter Tips Entering Sphincter Model. Independent laboratory - data on file.



hy would Cook Endoscopy modify an idea that was already working well?

The answer is clear. DomeTip Technology has now been available

on three of our sphincterotomes, Fusion Omni, Fusion IDE Tome and DASH-480 Systems.

Immediately the news began to come back that the new shape was successfully

assisting with cannulation. We decided to put the new shape of access to the test.

With the help of an independent laboratory we decided to compare our very own DASH Sphincterotome to the same DASH Sphincterotome with a DomeTip. The test would be an in vitro test using a simulated papilla structure made of a soft material.

As the tomes were pushed through the 25mm test fixture designed to simulate the folds of the papilla, what force would be needed to pass the two shapes through? At

what point would the tomes slide through the resistance offered by the model?

The results were obvious immediately. The domes needed between .2 and .4 newtons of force to negotiate the model. The non-dome DASHES, which already had very smooth and specially molded tips needed twice as much force or between .6 and .8 newtons of force.

The choice was obvious. We had a better product to present to our customers. The future is here and it's name is DomeTip!



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# Euro EUS 2006 · HAMBURG 28-29 April 2006

# First Announcement

# EUS – Beyond the guidelines

# Euro EUS 2006 · HAMBURG

"EUS — Beyond the guidelines" offers a new dimension in Endoscopic Ultrasound and shares solutions for the medical needs in EUS. This workshop combines live-cases and interactive lectures on Clinical Standards and New Technologies in Gastrointestinal Endosonography.

The Course language will be English.

# **MAIN TOPICS**

- EUS-FNA
- EUS and Therapeutic Endoscopy
- New Developments:
  - SonoElastography, New Probes
  - Endomicroscopy, OCT
  - -Therapeutic EUS

## **FRIDAY, APRIL 28**

- 8:00 Registration
- 9:00 Welcome
- 9:15 17:30 Courses
- 20:00 Dinner (Registration required)

## **SATURDAY, APRIL 29**

- 9:00 17:40 Courses
- I7:50 Closing Remarks and Invitation for EURO EUS 2007
- I8:00 End of Program

# **Scientific Committee**

AGENDA

- P. G. Arcidiacono (Milan, Italy)
- M. Giovannini (Marseille, France)
- E. Santo (Tel-Aviv, Israel)

## **Major Sponsors**







HITACHI Medical Systems Europe Holding AG

**Chairmen Euro EUS 2006** 

- E. Burmester (Lubeck, Germany)
- F. Hagenmuller (Hamburg, Germany)



# A Simple Philosophy

When clinicians came to Bill Cook forty years ago, and twenty years later to Don Wilson, they needed specific medical devices to help them care for their patients, devices that simply did not exist at the time. Bill and Don responded immediately and innovatively to those needs. Responding to the needs of the clinician: That's how Cook Inc. and Wilson-Cook Medical (now known as Cook Endoscopy) began, it's how the companies grew, and it remains the way we do business today.

By remaining true to that simple philosophy, we have formed and continue to form close working relationships with endoscopists around the world. That philosophy built a company that listens carefully to your needs, thoroughly understands those needs, and responds with innovative solutions.

Thanks to our relationships with you, we try to see the world from your perspective and more fully understand your concerns. We understand that among your many concerns are: cost management, increased procedural efficiency, improved room turnaround, and, most importantly, reduced complications – all aimed at the ultimate goal of improving the quality of care for your patients.

Some truly innovative and clinically efficient ways we've addressed your concerns include: industry-leading sphincterotomes, like the DASH; the broadest selection of plastic stents on the market; and cutting-edge devices, such as the Saeed Six Shooter Multi-Band Ligator, the TriClip, and the Zilver Metal Biliary Stent.

In just the past year, working with clinicians like you, we introduced several innovations that can make a difference in your practice. Going beyond the conventional "smaller and sharper" view of cannulating tips, we created the DomeTip, which completely changes the shape of access to "smooth and rounded" for potentially faster access and reduced trauma. There's a whole new generation of Fusion devices, which give even more power and options to the clinician and are sure to raise the bar for procedural efficiency. By adapting the time-tested Saeed Six Shooter to mucosal resection, we created Duette, which revolutionizes the treatment of Barrett's esophagus and early esophageal cancers.

Often inspired by partnerships with clinicians, almost all of our products are developed in-house – rare in the industry – by one of the hardest working and most inventive research-and-development teams in the world.

We've made it our business to get to know you. We've made it our business to clearly understand your needs. In the future, the solutions to those needs will undoubtedly change, but the way we create those solutions will remain the same: by collaborating with you and by remaining responsive to your needs. That's Cook Endoscopy's philosophy. That's what sets us apart from the rest of the field.

Bill Gibbons President



# to the needs







The eru **OF ENDOSCOPY** 

## **Patients Are Not The Only Ones To Suffer Adverse Events**

#### By Steve Frandzel

CHICAGO—Granted, endoscopists don't face the harsh conditions and occupational hazards of, say, a North Atlantic sword boat crew, or firefighters who snuff out oil field blazes. But the profession comes with its own set of hazards, some of which can

cause serious injuries, pain and disability—enough to force changes in, or even end, careers.

## Work-Related Injuries

"Gastroenterology is а dangerous profession. We are at risk for numerous injuries physical and musculoskeletal problems associated with factors such as repetitive motion and long hours standing with poor posture," said Ray Keate, MD, a gastroenterologist with Richmond Gastroenterology Associates in Virginia, and former Chair of the Division Gastroenterology and of Hepatology at the Mayo Clinic in Scottsdale, Ariz. He also emphasized the connection between psychological stress and physical injury: "Endoscopists are under a

lot of pressure to perform procedures. The volume pressure is very real, and it can lead to injuries." Dr. Keate and several colleagues addressed endoscopists' on-the-job perils during a symposium at the 2005 Digestive Disease Week meeting.

The risks to clinicians who perform endoscopy are rarely discussed formally at professional meetings, but the subject of

"The Perils of Endoscopy: Patients Are Not The Only Ones To Suffer Adverse Events" by Steve Frandzel. Reprinted from Gastroenterology & Endoscopy News, September 2005, 56:1, 16 – 17. Copyright © 2005 by McMahon Publishing Group.

"Gastroenterology is a dangerous profession. We are at risk for numerous physical injuries and musculoskeletal problems associated with factors such as repetitive motion and long hours standing with poor posture."

- Ray Keate, MD

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aches and pains often comes up when a group of gastroenterologists gather in a room, noted Dr. Keate. Indeed, any research that has been conducted shows that endoscopists have a lot to talk about. In a survey completed by about 300 endoscopists, 27% reported back pain, 13% neck problems, 19% thumb pain, 32% carpal tunnel syndrome and/or hand pain, 19% shoulder pain and 15% elbow problems (Buschbacher R. Endoscopy 1994;26:539-544). Among respondents, 42% said that the pain bothered them during endoscopy, 56% said they were troubled by pain during endoscopy or other workrelated activities, and 66% said that they experienced pain whether they were at work or not. In addition, 8% of the endoscopists said that they were forced to reduce the number of endoscopic procedures that they perform, 2% had eliminated endoscopy from their practices, and 4% had retired because of chronic pain. Preliminary results from a survey that Dr. Keate conducted himself found even higher incidences of some types of endoscopy-related pain.

Jerry Siegel, MD, Clinical Professor of Medicine at Albert Einstein College of Medicine and Director of Therapeutic Endoscopy at Beth Israel Medical Center, New York City, did not argue with the findings. After more than two decades of stooping over endoscope eyepieces (before the days of video endoscopy) and wearing a heavy, one-piece lead apron during thousands of endoscopic retrograde cholangiopancreatographies (ERCPs), he developed compression of his cervical spinal column and myelopathy. His arms and legs weakened and, at times, went numb. Dr. Siegel noted that performing a colonoscopy often requires the operator to use the wrist to twist and turn the scope, and such maneuvers became difficult because of his myelopathy. "Even my gait was disturbed. I would have failed a sobriety test if asked to walk a straight line," he said. In addition, Dr. Siegel developed asthma from continual exposure to gluteraldehyde fumes emanating from disinfection basins and newly cleaned endoscopes. Latex sensitivity followed, requiring additional work adjustments and intensive treatments.

Eventually, surgeons implanted titanium plates to decompress Dr. Siegel's spinal column. Rehabilitation took months. Once back at work, he lightened his endoscopy load and began wearing a light-gauge, two-piece apron during ERCP. Dr. Siegel's problems may be more severe than those most of his colleagues have endured, but many of them are not uncommon.

"Endoscopists are predisposed to these problems at a higher rate than other types of physicians," said Ralph Buschbacher, MD, Professor and Chairman of Physical Medicine and Rehabilitation at Indiana University School of Medicine, Indianapolis. Dr. Buschbacher became interested in the woes of endoscopists more than a dozen years ago while treating a gastroenterologist for thumb pain. At first, he diagnosed the problem as carpal tunnel syndrome, but he soon concluded that the patient had tendonitis of the flexor tendon of the thumb. "After that, I began to watch endoscopists conducting procedures and saw the source of the thumb problems, as well as other problems," said Dr. Buschbacher.

Endoscopists' thumb pain is often caused

by the need to rotate the endoscope's pinwheel for prolonged periods, which can create overuse injuries, explained Dr. Buschbacher. "With current scopes, there's no good solution except to minimize thumb movement, or to spread out procedures over several days so you're not using your thumb for such extended periods of time." He added that special thumb braces or splints may help, but they also may interfere with the endoscopist's level of control.

Low back pain can result from standing in posturally compromised positions, bending, twisting and placing asymmetric stresses on the spine—factors that can lead to herniated disks, radiculopathy and potentially numbness and weakening in the legs. Wearing a heavy lead apron during ERCP only aggravates the problem, as does improperly lifting heavy objects.

Shoulder problems often occur from a combination of scope movements that involve flexion, internal rotation, overuse and overhead activity (such as scope twisting, as mentioned by Dr. Siegel), which put undue strain on the shoulder architecture. Multiply those forces by numerous procedures, and the repetitive, biomechanically stressful motions take their toll. Individuals with weak rotator cuff muscles are more prone to shoulder injuries.

The elbow is subject to lateral epicondylitis (tennis elbow) and medial epicondylitis (golf elbow), resulting from strenuous or repetitive wrist flexion and extension and forceful gripping of the endoscope, explained Dr. Buschbacher.

Video monitors mounted high on the wall are a prime source of neck troubles because

THE PERILS OF ENDOSCOPY Continued on page 10

# The hands-free endoscope docking station

ScopeDoc offers a wide range of benefits for therapeutic endoscopy. It is ergonomically designed to:

- Decrease procedure time
- Reduce physician fatigue
- Provide hands-free opportunity
- Increase lab turnover and efficiency



Endoscopy

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# THE INDIANA UNIVERSITY SCHOOL OF MEDICINE ERCP GROUP



Glen A. Lehman, M.D.



Stuart Sherman, M.D.

# World-Class Care, Research and Education

t should surprise no one that the Indiana University School of Medicine's Gastroenterology/Hepatology Division would draw patients from Indiana and surrounding states. The Division, however, now serves patients from coast-to-coast and from abroad.

One reason: an outstanding specialty team involved in Endoscopic Retrograde Cholangiopancreatography (ERCP). Group physicians, with their expertise in endoscopic and radiological procedures, are renowned as leading authorities in the field and have extensive knowledge of the indications, applications, and complications of diagnostic and therapeutic ERCP.

The Indianapolis-based ERCP center gained its world-wide reputation and expertise deliberately over the last three decades.

#### More than 2,500 ERCPs Annually

"We have concentrated efforts in this area for more than 30 years," explains Glen A. Lehman, M.D., Professor of Medicine and Radiology. "We have many research studies involving ERCP techniques, safety and outcomes. Our staff members have been involved in numerous studies and reviews in this area and they have published extensively. The team has written more than 100 articles, and are associate editors and on the editorial boards for journals including *Endoscopy* and *Gastrointestinal Endoscopy*.

Further, adds Dr. Lehman, "We are a high volume center and perform more than 2,500 ERCPs annually. Our team has extensive experience with both routine and complicated cases." Some of these include:

- · Patients with failed initial cannulation
- Patients with large or difficult to remove common duct stones
- Patients with a complex biliary or panceative structures that need stenting

- Patients with pancreas divisum who need minor papilla therapy
- Pancreatic stone cases which may require shockwave lithotripsy

In addition, the center's physicians teach other professionals about ERCP and endoscopic ultrasound as it pertains to pancreatobiliary disease. They are specialists in photodynamic therapy, endoscopic GERD therapy and other therapeutic endoscopy procedures.

The faculty is also involved in an ongoing partnership with device manufacturers, including Cook Endoscopy, in designing and evaluating instrumentation for ERCP.

#### **ERCP Case Histories**

As a leading referral center, the division receives many challenging and complex cases.

In one case, involving a thirtyseven-year-old female patient with recurrent pancreatitis, ERCP provided a solution for a pancreas divisum. At IU, she underwent ERCP with minor papilla sphincterotomy with placement of a temporary 3 FR unflanged plastic stent.

The stent passed spontaneously in the next three weeks and she has remained asymptomatic with no pancreatitis for more than four years.

For a fifty-five-year-old male with a prior history of excessive alcohol consumption and recurrent pancreatitis, ERCP provided relief from a different situation.

A CT scan showed multiple large calcified stones in the head of the pancreas, within the dilated main pancreatic duct upstream.

"After referral to IU for treatment, we applied extracorporeal shockwave lithotripsy on two

Lois Bucksot, RN, BSN, I



occasions. This resulted in excellent stone fragmentation," notes Dr. Lehman.

"ERCP with pancreatic sphincterotomy removed the residual stone fragments. The patient has not had any more pancreatic attacks in the ensuing 2-1/2 years."

#### **Research and Fellowships**

"The ERCP faculty are on the forefront of endoscopic research in the pancreaticobiliary tree," adds Stuart Sherman, MD, Professor of



Medicine and Radiology and Director of ERCP. "We have recognized authorities on the application of ERCP to diseases of the pancreas and biliary tree. Primary research centers on diagnostic and therapeutic ERCP, sphincter Oddi of manometry, methods to prevent ERCP indured complications, advancements in technology, and gastroesophageal reflux. The faculty also conducts

ERCP Nurse Coordinator

ongoing studies in endoscopic management of idiopathic pancreatitis and improved methods of tissue sampling. The faculty offers numerous workshops." (See side article: "Physicians' Workshop.")

This expertise also results in outstanding patient care, notes Lois Bucksot, RN, BSN, ERCP Nurse Coordinator. "Our nurses are highly experienced in assisting with therapeutic ERCP including sphincter of Oddi manometry." She adds that the Division conducts two-day nurses workshops in therapeutic ERCP for nurses. Information is available on the ERCP website: medicine.iupui.edu/ercp Further, the ERCP group offers a one-year ERCP advanced endoscopy fellowship-training program. The program is internationally recognized for both patient care and research. Training is carried out at the University Hospital, an adult tertiary care hospital that functions as a major quaternary referral center.

During the year, fellows participate in eight months of hands-on training in therapeutic ERCP. Three months are devoted to research, dedicated to developing new accessories and techniques, and answering questions about the appropriateness of ERCP and manometry. The objectives: Reduce the rates of complications and broaden the applications of ERCP. A typical fellow finishes the year with a minimum of four publications in refereed journals.



Jim Watkins, M.D. and Lois Bucksot, RN, BSN, ERCP Nurse Coordinator

#### **Team Approach**

"The expertise of IU ERCP is based very much on our team approach. We have very experienced ERCP nurses and assistants. And we're only as good as our team," concludes Dr. Lehman.

# Physicians' Workshop

#### **Course Description**

This course is designed for gastroenterologists, surgeons and fellows engaged in the comprehensive care of patients with pancreatobiliary disease. Experts in the area of ERCP will review and discuss current knowledge of the following topics.

- Informed consent & legal issues
- Pancreatic pseudocyst
- Pancreas divisum
- Chronic Pancreatitis Diagnosis
  and Management
- Malignant Pancreatitis -Diagnosis and Managemen
- Idiopathic Pancreatitis -Diagnosis and Managemen
- Sphincter of Oddi dysfunction/ manometry - techniques and interpretations
- Difficult cannulation
- Biliary Disorders sclerosing cholangitis, biliary strictures
- Endoscopic Ultrasound and MRCP as they pertain to pancreatobiliary disease
- Bile Duct Stone management
- Malignancies of Bile Duct Obstruction - Diagnosis and Management
- Bile Leaks Diagnosis and management
- Training Issues at ERCP

These are accomplished through clinical observation, review of films, and group discussion.

## Physician Course Schedule For 2006

The following dates are available:

- April 6-7 (fellows)
- June 22-23
- August 10-1
- October 5-6



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INNOVATION

from the world leader in Interventional <u>Endoscopic</u> Ultrasound technology...

# **ECHO**BRUSH

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# **Endoscopic Ultrasound for the** Clinician: 2005 World Congress Post-Graduate Course

Dr. Anand Sahai, St. Luc Hospital, Montreal

ook (Canada) Inc. and Pentax were the proud sponsors of an international EUS post-graduate course held in Montreal in conjunction with the World Congress of Gastroenterology. The event featured a faculty of internationally recognized endosonoghaphers who addressed several novel issues in EUS: EUS for portal hypertension, autoimmune pancreatitis, EUS-contrast agents, and therapeutic EUS. There was also a forum on issues relating to the use of EUS in developing countries. "We tried to provide a stimulating educational experience by covering a wide variety of EUS topics and by including a novel feature -- a lively, interactive expert debate on the need for radial EUS," said Dr. Anand Sahai, the course director.

The CME-accredited event, held at the Montreal Convention Centre (Palais du Congress) on September 11th, attracted more than 100 attendees and was considered a great success by both its sponsors and faculty.

"I was extremely pleased, and somewhat surprised, with the final turnout for our first, and hopefully not last, International EUS Post-graduate Course," explained Dr. Sahai. "It is always heartening to see the continued strong and growing interest in EUS and I commend the attendees on their continuing efforts to learn EUS and to bring this exciting technology to their communities. With the cooperation of Cook Endoscopy, we hope to continue to provide innovative and productive EUS learning activities. Keep the faith!"

# THE PERILS OF ENDOSCOPY Continued from page 7

they require viewers to look upward. "Monitors tend to be mounted too high, so we're always looking up, and that puts a lot of strain on the neck, back and shoulders, and that's also very uncomfortable," said David Carr-Locke, MD, Director of Endoscopy at Brigham & Women's Hospital, Boston. "I recommend that endoscopy suites have all monitors installed on adjustable booms that allow height adjustments. It's much better to look at monitors that are positioned at, or even slightly below, eye level."

Dr. Carr-Locke also discussed radiation hazards during ERCP. When simple safety precautions are followed, the radiation exposure risk is extremely low for endoscopists and far lower than that for interventional cardiologists, he said. In fact, some nurses are likely to get hit with more radiation because they often position themselves at the patient's head, where radiation exposure is more concentrated than at other locations around the fluoroscopy unit. "I hear from colleagues abroad that

# some nurses won't go into the room during

ERCP because they are afraid of radiation exposure, but it's practically zero if done correctly," explained Dr. Carr-Locke, adding that many endoscopists don't understand the basic aspects of radiation, such as where it emanates from the machine, or the importance of the inverse square law (the intensity of the radiation decreases at a rate proportional to the square of the distance from the source). Dr. Carr-Locke urged that endoscopy suites be inspected by the institution's radiation safety officer to ensure that the equipment is in proper working order, that radiation levels are acceptable and that staff are in the safest possible positions at all times.

"I think that endoscopists are aware of the issues regarding radiation, and that they know musculoskeletal injuries are fairly widespread among their colleagues," added Dr. Carr-Locke. "But many just try to ignore it, and in general many of them don't know what to do about it."

## Post Liver Transplant Anastomotic Stricture:



Melissa H. Clark, BSN, RN

n June 2004, a female presented to Carolina's Medical Center for the evaluation of abnormal liver function tests. The patient's significant medical history included a liver transplant in 2003 due to Hepatitis C. In January 2004, the patient had an Endoscopic Retrograde Cholangiopancreatography (ERCP) with a biliary stent placed for a post liver transplant anastomotic stricture. Dr Michael Gaspari, a Gastroenterologist with Carolina Digestive Health Associates, was assigned to evaluate the patient. ERCP was recommended to evaluate the cause of the abnormal lab work. Dr. Gaspari possessed a great knowledge base with FUSION and elected to proceed with the procedure. The risks and benefits of the procedure were explained to the patient with verbalization of understanding.

Dr. Gaspari began the procedure with an Olympus TJF-160 duodenoscope and advanced to the second portion of the duodenum revealing the ampulla. Upon inspection, it was noted that

the patient had an occluded stent which had migrated into the duodenum. The stent was removed with a snare. A FUSION sphinctertome with a FUSION .035 wire guide preloaded into the Intra Ductal Exchange (IDE) port was used during initial cannulation. Once biliary access was achieved, half-strength contrast was injected and revealed two biliary strictures. The first stricture was noted at the anastomosis site and the second at the bifurcation of the common hepatic duct. The FUSION wire was passed successfully across the strictures and an IDE was performed. The physician chose to use a six millimeter and an eight millimeter dilation balloon to expand the anastomotic stricture. Stent placement was achieved using a FUSION stent introducer to place a single 10 French by 7 centimeter stent into the biliary system. Once correct placement was verified, the physician performed an IDE and the stent was deployed. The wire guide was left in the biliary system to maintain access for a rapid reintroduction for the placement of a second 10 French by 7 centimeter stent using the same FUSION stent placement device. The duodenoscope was withdrawn from the patient and the procedure was successfully completed.

In conclusion, Dr. Gaspari demonstrated the effectiveness of utilizing FUSION to maintain bile duct access during multiple stent placement. Placing multiple stents allows for adequate bile flow which will correct the abnormal liver function tests as well as maintaining patency of the common hepatic bifurcation stricture and the anastomotic stricture. The ability to maintain biliary access, thereby reducing repeated cannulation attempts, has been observed to decrease procedure time, which indicates a clinical benefit of Fusion. Therefore, this procedure illustrates how the FUSION biliary system can convert a long and tedious procedure into a more efficient and concise procedure. As a result, this case is an example of how FUSION is changing the expectations of therapeutic biliary accessories.

Since this case was presented, we're pleased to announce that Melissa Clark has joined Cook Endoscopy as Clinical Affairs Education Specialist.

Biliary access with the FUSION sphincterotome







Stent Placement of two 10 FR x 7 cm.

Placement of first 10 FR x 7 cm stent.

Placement of second 10 FR x 7 cm stent.







Introducing DomeTip™ The new shape of access

You wouldn't throw a square football, so why insert a flat-tip catheter? The more natural shape of the DomeTip provides:

Easier access • Potentially less trauma • Ease-of-use that can save time

To see other sensible ideas in therapeutic endoscopy, contact your Cook Endoscopy Sales Representative at 800-457-4500 (US only) or visit www.cookendoscopy.com



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# FUSION: NEW FEATURES Continued from page 1

A newly strengthened catheter and IDE Port give improved pushability to the new FUSION Extraction Balloon, making it one of the best in its class. With one balloon, this device delivers multiple size options and allows contrast injection, all with superb wire guide control. Use the FUSION Locking Device with either a short or long wire to perform multiple stone extractions without ever losing access. Free from managing the wire during extraction, the assistant can fully concentrate on inflation/deflation and contrast injection. Once the duct is clear, you have the choice of three exchange techniques to load new devices. Try the FUSION Extraction Balloon and experience procedural efficiency at its very best.

Physician and assistant wire guide control are both enhanced with the new Breakthrough Channel Design of the OMNI-Tome and the OMNI ERCP Catheter, which give you the option to cannulate with or without a wire guide. The solid wire guide lumen accommodates multiple wire guide diameters and allows flushing for hydrophilic wire



guides as well. After locking the wire into the FUSION Locking Device, simply POP the wire out of the Breakthrough Channel and ZIP it along the wire and you are ready to load the device of your choice. All OMNI devices offer the new shape of access: the DomeTip. The smooth, rounded DomeTip delivers potentially faster access and less trauma during cannulation. The OMNI line includes an OMNI-Tome Sphincterotome with pre-loaded Fusion Ultra Short Wire Guide.

The proven effectiveness of the Zilver Biliary Stent is now available with FUSION Technology, allowing you to deliver a metal biliary stent across malignant strictures while the wire is securely locked in place. A stiffening stylet in the wire guide lumen offers excellent pushability through difficult strictures. The stylet can be removed at any time to allow the use of a long wire guide. All the assets of the Zilver Stent – precise deployment with no foreshortening, flexibility for difficult anatomy, and outstanding radial-force to maintain the lumen – are available in multiple diameters and lengths.

Because it is wire-guided, the **FUSION** Extraction Basket allows access to ductal segments not achieved with traditional baskets. Lock your wire guide and perform multiple basket sweeps to remove stones and sludge. Assistants and physicians alike will appreciate these procedural options, as well as the smooth functioning baskets and ergonomically designed handle.

These new FUSION system features have been designed with one goal in mind: to increase the efficiency of your practice. We think you'll agree. Experience the power and versatility of FUSION today by calling your COOK Endoscopy Representative.

Endoscopy

# THE**CHANNEL**»

# The Reliability of Band Ligation: A New Frontier

A novel device facilitates circumferential EMR in Barrett's oesophagus with early malignant changes

OPENHAGEN – Many techniques have been developed for endoscopic mucosal resection (EMR) in the upper gastrointestinal tract. For early cancers of the oesophagus, the "suck and cut" techniques using a transparent cap, popularized by Inoue, or band ligation, introduced by Chavez, are the mostly used.

However, Barrett's oesophagus (BE) is prone to a high recurrence rate after localized EMR, even after histological examination has shown complete removal

of the localized malignant lesion in the EMR specimen. The high recurrence rate may be explained by the existence of multifocal malignant and premalignant lesions in BE which have been overlooked in the initial diagnosis prior to EMR or by metachronous development of dysplasia.



Dr. Stefan Seewald, University Hospital Hamburg-Eppendorf

High-grade intraepithelial neoplasia (HGIN) and intramucosal carcinoma (IMC) in BE often occur in the absence of endoscopic abnormalities. In a relatively high percentage of patients with

BE, these early malignant changes were detected incidentally. Endoscopic detection with various staining methods, other currently available imaging techniques and four quadrant random biopsies using jumbo biopsy forceps have yet to be perfected.

To overcome these problems extensive or even circumferential EMR (CEMR) has become more popular in order to remove the whole BE. However, with the currently available techniques, EMR is time consuming and expensive. Therefore a modified multiband ligator (MBL) has been developed by Soehendra et al. to facilitate extensive or circumferential EMR (CEMR) which allows sequential banding and snare resection without the need to withdraw the endoscope.

The threading channel of the cranking device is enlarged from 2 mm to 3.2 mm to enable band delivery with a snare inserted in the therapeutic endoscope. The six shooter MBL is preferred. The BE is first sucked into the ligating barrel and the rubber band is deployed in the same manner like variceal ligation creating a pseudopolyp. During suction and ligation, the snare is retracted into the working channel of the endoscope. The pseudopolyp is then immediately resected using a mini hexagonal polypectomy snare sized 1.5 x 2.5 cm with pure coagulating current (60 Watt). No submucosal saline injection is required prior to EMR as neither technical advantage nor prevention of perforation can be achieved.

The second resection is performed with a bit of overlapping to ensure that no BE remains. The procedure is started from the lowest level of BE and carried out circumferentially until the entire BE is completely removed. The modified MBL and the mini polypectomy snare are now commercially available as the Duette ® multi band mucosectomy kit (CE0123, Cook Ireland Ltd., Limerick, Ireland).

This novel technique of MBL-EMR facilitates and simplifies circumferential removal of BE containing HGIN and/or IMC. In patients with short segment BE and early malignant changes complete CEMR of the Barrett's segment may be performed in only one session. Strictures that develop after resection are related more to the circumferential nature of EMR and not specifically to the technique. Strictures are usually manageable by bougienage. From our experience no patient has persistent dysphagia after completion of treatment.

Long-term follow-up is needed to observe for late recurrence and to determine the clinical impact of this method.

Hexagonal snare which can be retracted into the working channel during suction and ligation

CEMR with complete removal of BE with one Duette® kit



Final result: Newly formed squamous cell epithelium



# Study Shows COST EFFECTIVENESS OF DUETTE

# A Comparison of Two Endoscopic Resection Techniques in Barrett's Esophagus

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## Introduction

Endoscopic Mucosal Resection is a frequently used treatment for patients with High Grade Dysplasia (HGD) or Early Cancer (EC) in a Barrett's esophagus (BE).

With the widely used ER cap technique the mucosa is first lifted with submucosal injections of a epinephrine solution (1:100.000) and subsequently sucked into a cap and resected. For each resection a new snare has to be used.

Recently a new "suck and ligate" device has been introduced. This device uses a modified variceal ligator that has multiple rubber bands attached to a standard variceal ligation cap. With

this Multiband Mucosectomy (MBM) technique the resection is performed without prior submucosal injections and a single snare is used for all resections.

#### Aim

To retrospectively compare the new MBM technique with the ER cap technique with respect to:

- Duration of the procedure
- Costs of the disposable materials

A.A. Hanrath RN

- Size of specimens
- Rate of acute complications

#### Methods

Between January and April 2005, 27 MBM procedures were performed in 13 consecutive BE patients with HGD or EC. (12 males, mean age 63 years, mean length BE 5cm).

These procedures were compared with 23 ER cap procedures, performed in 13 BE or HGD patients (10 males, mean age 68 years, mean length BE 5cm).

## Results

	MBM procedure	ER cap procedure
Number of procedures	27	23
Mean of resections	6	4
Mean size specimen	17mm	21mm
Mean costs of disposables	301 €	356€
Mean duration of the procedure	6 pieces in 42 min.	5 pieces in 56 min.
Acute complications	15 % minor bleeding	17 % minor bleeding 1 perforation

#### Conclusions

- In this retrospective study, we found that MBM allows for quick and safe removal of BE with HGD and EC.
- Compared to the ER cap technique the specimens were found to be smaller but the <u>MBM</u> technique appears easier to use, and saves time and costs.

Disclosure: the department of Gastroenterology has received research support from Olympus Corp. and Cook Endoscopy.



#### ERCP In A Patient With Situs Inversus

Siriporn Ratanalert, RN, Pralichat Busamrong, Prinya Soontrapornchai, MD

NKC Institute of Gastroenterology and Hepatology Patients with situs inversus have inverted anatomy of the major organs that contain bile and pancreatic ducts which causes the ERCP procedure to be more difficult than an ordinary ERCP. Generally, it is necessary to turn a patient on the right side to facilitate the passage of the endoscope into the duodenum. Due to the limitation of the space in the ERCP suite, we decided to proceed with the ERCP in the left lateral position as routinely performed in ordinary patients. The author worked closely with the endoscopist (the third author) to secure adequate orientation of the patient's anatomy in each step of the ERCP procedure. A sphincterotomy was performed for suspected papillary stenosis and biliary sand stones were removed via a balloon catheter. The cholangiograms were shown as Fig. 1 and 2. In conclusion, ERCP in a patient with situs inversus can be performed in the conventional position. The key success factor was definitely good orientation to the inverted anatomy in this extraordinary case.

\* ERCP = Endoscopic Retrograde Cholangio-Pancreatomy

Cholangiogram showed dilated bile duct and normal pancreatic duct on the left side of patient. The scope was in the longroute position to access the second part of duodenum.

Gallbladder was also on the right side of bile duct.







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# **UPCOMING 2006 EVENTS**

Pancreatic & Biliary Endoscopy Dr. Simon Lo	Los Angeles, CA	Jan. 20 - 22
8th International Symposium: Diagnostic & Therapeutic Endoscopy Prof. Horst Neuhaus	Dusseldorf, Germany	Feb. 10-11
Diagnostic & Therapeutic Endoscopy Dr. Geenen	Las Vegas, NV	Feb. 19-21
<b>Rocky Mountain Interventional Endoscopy</b> Dr. Chen	Denver, CO	Feb. 23-25
CDDW	Banff, Alberta, Canada	Feb. 24-28
Brigham & Utah Endoscopy Course	Salt Lake City, UT	Mar. 15-16
<b>Viva la Vida</b> Johns Hopkins University School of Medicine	Puerto Rico	Mar. 15-18
<b>EURO EUS 2006</b> Dr. Marc Giovannini	Hamburg, Germany	April 28-29
<b>XII Workshop</b> Prof. Guido Costamagna	Rome, Italy	May 11-12
DDW	Los Angeles, CA	May 21-24
SGNA	San Antonio, TX	May 21-23
Medical University of South Carolina Advanced Endoscopy Update Drs. Peter Cotton & Rob Hawes	Kiawah Island, SC	May 26-28
XXIVth Gastroenterology & Endotherapy European Workshop, ERASME Prof. Jacaues Devière	Brussels, Belgium	June 19-21



