



*56<sup>th</sup>*  
*Annual Meeting*

---

July 28-31, 2013

*Grand Traverse Resort and Spa*  
*Acme, Michigan*

The Midwest Surgical Association would like to thank the following companies for their generous support of our meeting through educational grants:

## **SPONSORS**

---

**Cubist Pharmaceuticals**

**W.L. Gore & Associates, Inc.**

The Midwest Surgical Association gratefully acknowledges the support of the following exhibiting companies.

## **EXHIBITORS**

---

BK Medical

Cubist Pharmaceuticals

Ethicon

GE Healthcare

Genomic

LifeCell

Novadaq

Olympus

Pacira

Sanofi Biosurgery – Genzyme

Starsurgical, Inc.

Stryker Sustainability Solutions

TEI Biosciences

Waverly Health Center

W.L. Gore & Associates, Inc.



# MIDWEST SURGICAL ASSOCIATION

## 56<sup>th</sup> ANNUAL MEETING

Grand Traverse Resort and Spa  
Acme, Michigan  
July 28–31, 2013

---

### Table of Contents

---

2	Officers
3	Committees
5	Objectives
5	Accreditation, <i>AMA PRA Category 1 Credits™</i> , Disclosure Information
6	Future Meetings
6	Educational Grants
7	Past Presidents
9	Mission Statement
10	New Members
11	MSA Foundation
12	Schedule of Events
13	Family Program
15	Scientific Program
25	Scientific Abstracts
53	Poster List
54	Poster Abstracts
61	Spectacular Problems Abstracts
68	Scott W. Woods Memorial Lecture
70	William H. Harridge Memorial Lecture
73	In Remembrance
74	Notice of Change
75	Notice of Death

---

# Officers, Councilors, & Past Presidents

---

## OFFICERS

Stephen F. Sener, MD	President	2012-2013
Raymond P. Onders, MD	President Elect	2012-2013
Margo C. Shoup, MD	Secretary	2012-2015
James G. Tyburski, MD	Treasurer	2010-2013
Conor P. Delaney, MD, PhD	Recorder	2011-2014
Steven DeJong, MD	Representative, ACS	2009-2015
Anthony J. Senagore, MD, MS, MBA	Alternate, ACS	2009-2015
Mary C. McCarthy, MD	ACS Advisory Council For Surgery	2010-2013

## COUNCILORS

Richard C. Anderson, MD	Peoria, IL	2010-2013
Mary-Margaret Brandt, MD	Ann Arbor, MI	2012-2015
Herb Chen, MD	Madison, WI	2012-2015
Peter A. Ekeh, MD	Dayton, OH	2012-2015
Lynne M. Jalovec, MD	Peoria, IL	2011-2014
James Madura, II, MD	Scottsdale, AZ	2010-2013
Michael J. Rosen, MD	Solon, OH	2011-2014
C. Max Schmidt, MD	Indianapolis, IN	2010-2013
Nicholas J. Zyromski, MD	Indianapolis, IN	2011-2014

## PAST PRESIDENTS

Richard A. Berg, MD	Gross Point Farms, MI	2012
Roxie M. Albrecht, MD	Oklahoma City, OK	2011
Donn M. Schroder, MD	Grosse Pointe Shores, MI	2010

# Committees

---

## LOCAL ARRANGEMENTS COMMITTEE

Anthony J. Senagore, MD, MS, MBA	Los Angeles, CA	2013
William C. Cirocco, MD	Gross Pointe Woods, MI	2014

## AUDIT COMMITTEE

Richard A. Berg, MD	2012-2013
James R. DeBord, MD	2012-2013

## PROGRAM COMMITTEE

Nicholas J. Zyromski, MD	Co-Chair (Advisor)	2007-2014
Katherine J.M. Liu, MD	Co-Chair	2009-2014
Conor P. Delaney, MD, PhD	Ex officio	2011-2014
Margo C. Shoup, MD	Ex officio	2012-2015
Stephen F. Sener, MD	Ex officio	2012-2013
William C. Cirocco, MD		2010-2015
Jeffrey S. Bender, MD		2011-2016
Scott M. Wilhelm, MD		2012-2017

## MEMBERSHIP COMMITTEE

David R. Farley, MD	Chair	2010-2013
Margo C. Shoup, MD	Ex officio	2012-2015
Stephen F. Sener, MD	Ex officio	2012-2013
Lynne M. Jalovec, MD		2010-2013
Arthur Carlin, MD		2011-2014
Rebecca S. Sippel, MD		2011-2014
Constantine Godellas, MD		2012-2015
Jeffrey M. Hardacre, II, MD		2012-2015

## EDITORIAL COMMITTEE

Conor P. Delaney, MD, PhD	Chair	2011-2014
Aaron R. Sasson, MD		2009-2013
Margo C. Shoup, MD		2010-2014
Christopher P. Brandt, MD		2011-2015
Samir K. Gupta, MD		2012-2016
Nicholas J. Zyromski, MD		2012-2016

**NOMINATING COMMITTEE**

Richard A. Berg, MD	Chair	2013-2017
Roxie M. Albrecht, MD		2012-2016
Donn M. Schroder, MD		2011-2015
Jerry M. Hardacre, II, MD		2010-2014
James R. DeBord, MD		2009-2013

## OBJECTIVES

Upon completion of this activity, participants should be able to:

1. Discuss information presented on the research activities of the association's members and integrate this information into clinical practice
2. Apply information gained from the meeting into future basic and clinical research activities
3. Utilize results of the research presented to improve patient outcomes

The purpose of this conference is to provide a vehicle for the distribution of peer-reviewed basic and clinical science research and to provide an opportunity for dialogue concerning topics of interest to the members of the Midwest Surgical Association. The target audience is surgeons.

## ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American College of Surgeons and the Midwest Surgical Association. The American College of Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

## AMA PRA CATEGORY 1 CREDITS™

The American College of Surgeons designates this live activity for a maximum of 10 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Of the *AMA PRA Category 1 Credits™* listed above, a maximum of 6.75 credits meet the requirements for Self-Assessment.



## DISCLOSURE INFORMATION

In compliance with ACCME Accreditation Criteria, the American College of Surgeons, as the accredited provider of this activity, must ensure that anyone in a position to control the content of the educational activity has disclosed all relevant financial relationships with any commercial interest. All reported conflicts are managed by a designated official to ensure a bias-free presentation. Please see the insert to this program for the complete disclosure list.

# Future Meetings

---

**August 3-6, 2014**

The Grand Hotel

Mackinac Island, Michigan

**July 26-29, 2015**

Grand Geneva Hotel

Lake Geneva, WI

# Educational Grants

---

The Midwest Surgical Association would like to acknowledge and thank the following sponsors who have provided educational grants received in support of this continuing medical education conference. The sponsors who have provided educational grants will be acknowledged on signs in the conference hall, the registration area, and the exhibit area.

**Cubist Pharmaceuticals**

**W.L. Gore & Associates, Inc.**



# Past Presidents of the Midwest Surgical Association

---

Richard A. Berg, MD	Mackinac Island, MI	2012
Roxie M. Albrecht, MD	Galena, IL	2011
Donn M. Schroder, MD	Mackinac Island, MI	2010
Jerry M. Hardacre, II, MD	Lake Geneva, WI	2009
James R. DeBord, MD	Mackinac Island, MI	2008
Anthony Senagore, MD	Farmington, PA	2007
Christopher McHenry, MD	Mackinac Island, MI	2006
Steven A. De Jong, MD	Niagara-on-the-Lake, Ontario, Canada	2005
Donald W. Moorman, MD	Mackinac Island, MI	2004
John P. Hoffman, MD	Galena, IL	2003
Larry R. Lloyd, MD	Mackinac Island, MI	2002
Donald J. Scholten, MD	Lake Geneva, WI	2001
Thomas A. Stellato, MD	Mackinac Island, MI	2000
Norman C. Estes, MD	Galena, IL	1999
Darrell A. Campbell, Jr., MD	Mackinac Island, MI	1998
Richard A. Prinz, MD	Sawmill Creek, OH	1997
Thomas A. Broadie, MD	Mackinac Island, MI	1996
Jason H. Bodzin, MD	Grand Traverse, MI	1995
Willard S. Stawski, MD	Mackinac Island, MI	1994
Gerard V. Aranha, MD	Lincolnshire, IL	1993
William C. Boyd, MD	Mackinac Island, MI	1992
Douglas B. Dorner, MD	Grand Traverse, MI	1991
John L. Glover, MD	Mackinac Island, MI	1990
Jack Pickleman, MD	Kohler, WI	1989
Samuel D. Porter, MD	Mackinac Island, MI	1988
William H. Baker, MD	Lake Geneva, WI	1987
Scott W. Woods, MD	Mackinac Island, MI	1986
Angelos A. Kambouris, MD	Lake Geneva, WI	1985
Richard E. Dean, MD	Mackinac Island, MI	1984
Anna M. Ledgerwood, MD	Sawmill Creek, OH	1983
Robert T. Soper, MD	Mackinac Island, MI	1982
G. Howard Glassford, MD	Lake Geneva, WI	1981
Clark Herrington, MD	Mackinac Island, MI	1980
Kenneth J. Printen, MD	Lincolnshire, IL	1979
Robert D. Allaben, MD	Mackinac Island, MI	1978
Richard S. Webb, MD	Itasca, IL	1977
Charles E. Lucas, MD	Mackinac Island, MI	1976
Frank A. Folk, MD	Itasca, IL	1975
Robert F. Wilson, MD	Mackinac Island, MI	1974

# Past Presidents of the Midwest Surgical Association continued

---

William H. Marshall, MD	Oakbrook, IL	1973
Ernest M. Berkas, MD	Mackinac Island, MI	1972
Wendell J. Schmidtke, MD	Valparaiso, IN	1971
Robert J. Freeark, MD	Kalamazoo, MI	1970
Robert A. De Bord, MD	Peoria, IL	1969
Vernon L. Guynn, MD	Lake Geneva, WI	1968
Jack C. Cooley, MD	Champaign-Urbana, IL	1967
Robert P. Hohf, MD	St. Charles, IL	1966
Douglas R. Morton, MD	St. Charles, IL	1965
William H. Harridge, MD	St. Charles, IL	1964
John B. Moore, III, MD	Champaign-Urbana, IL	1963
Peter V. Moulder, MD	Genoa City, WI	1962
Thomas W. Samuels, Jr., MD	Chicago, IL	1961
James Cross, MD	Rockton, IL	1960
Loring S. Helfrich, MD	Rockton, IL	1959
Loring S. Helfrich, MD	Rockton, IL	1958

# Mission Statement

---

The Midwest Surgical Association is a surgical organization made up of surgeons who have established reputations as practitioners, authors, teachers, and/or original investigators. The objective of this society is to exemplify and promote the highest standards of surgical practice, especially among young surgeons in the Midwest. The annual meeting is held in late July/early August each year in different locations throughout the Midwest and consists of a stimulating scientific program of the highest quality and a social program planned with children and families in mind.

## **THE MIDWEST SURGICAL ASSOCIATION**

5019 W. 147th Street

Leawood, KS 66224

Telephone: 913-402-7102

Fax: 913-273-9940

Email: [info@midwestsurg.org](mailto:info@midwestsurg.org)

Web: [www.midwestsurg.org](http://www.midwestsurg.org)

# New Members 2012

---

Congratulations and welcome to the following New Members elected at the 2012 Annual Meeting:

Nicole Kennedy	Detroit, MI
Michael McGee	Chicago, IL
James Ouellette	Kettering , OH
Alexander Sauper	Chicago, IL
Saad Shebrain	Kalamazoo, MI
Jerry Stassinopoulos	Detroit, MI
Melissa Whitmill	Dayton, OH

# Midwest Surgical Association Foundation

---

The Midwest Surgical Association is happy to announce the establishment of the Midwest Surgical Association Foundation. Foundation funding will be used solely for research awards, programming, special lectureship honorariums, and other appropriate scientific, research, or educational purposes.

The Midwest Surgical Association Foundation is a non-profit organization that is committed to exemplify, support, and promote the highest standards of surgical practice, especially among young surgeons of the Midwest. The Foundation has been organized to pursue exclusively charitable, educational, scientific, benevolent, and eleemosynary purposes including the promotion of surgical education and research that qualifies it as an exempt organization under Section 501©(3) of the Internal Revenue Code of 1986 and exempt from taxation under Section 501(a).

The Foundation may engage directly in charitable, educational, scientific, benevolent, or eleemosynary activities, including activities to promote surgical education and research. With increased support, these key arenas will strengthen the Association.

Not everyone has the time to participate in all Midwest Surgical Association activities and conferences, but by donating to the Foundation you are able to help support current activities, conferences, research, and lectureships as well as future projects.

The Foundation is now able to accept donations from members or nonmembers. If you would like to support the Association through its Foundation, both current and deferred gifts may be made. These donations are tax deductible and should be made out directly to:

## **Midwest Surgical Association Foundation**

5019 W. 147th Street

Leawood, KS 66224

Telephone: 913-402-7102

Fax: 913-273-9940

Email: [info@midwestsurg.org](mailto:info@midwestsurg.org)

Federal Tax I.D. Number: 20-8529483

You may also make donations on our web site using your Visa, MasterCard, Discover, or American Express credit card: **[www.midwestsurg.org](http://www.midwestsurg.org)**, under MSA Foundation and select Make a Donation.

If you have any questions, please contact MSA Headquarters at **913-402-7102**.

# Schedule of Events

---

## SUNDAY, JULY 28, 2013

12Noon – 6:00pm	MSA Registration Open, Tower Ballroom Foyer
2:00pm – 4:00pm	MSA Executive Council Meeting, Mackinac A
5:30pm – 6:00pm	New Member Reception, Peninsula A
6:00pm – 7:00pm	Welcome Reception, Pavilion
9:00pm – 10:30pm	Spectacular Problems in Surgery, Tower Ballroom

## MONDAY, JULY 29, 2013

7:00am – 8:30am	Continental Breakfast, Tower Ballroom Foyer
7:00am – 12Noon	MSA Registration Open, Tower Ballroom Foyer
8:00am – 12Noon	Exhibit Displays Open, Tower Ballroom Foyer
8:00am – 8:20am	Featured Posters, Tower Ballroom
8:20am – 8:30am	Welcome & Introductions, Tower Ballroom
8:30am – 8:30am	Scientific Session I, Tower Ballroom
9:30am – 10:00am	Scott Woods Memorial Lecture, Tower Ballroom
10:00am – 10:15am	Morning Break/Exhibits & Poster Viewing, Tower Foyer
10:15am – 12:15pm	Scientific Session II: Resident Paper Competition, Tower Ballroom
12:15pm – 1:00pm	William H. Harridge Memorial Lecture, Tower Ballroom
6:00pm – 7:00pm	Cocktail Reception, Governor's Foyer
7:00pm – 11:30pm	Annual Banquet & Dinner Dance, Governor's A

## TUESDAY, JULY 30, 2013

7:00am – 12Noon	MSA Registration Open, Tower Foyer
8:00am – 12Noon	Exhibit Displays Open, Tower Foyer
7:00am – 8:30am	Continental Breakfast, Tower Foyer
8:05am – 8:15am	Welcome & Introductions, Tower Ballroom
8:15am – 10:15am	Scientific Session III, Tower Ballroom
10:15am – 10:30am	Morning Break and Poster Viewing, Tower Foyer
10:30am – 12:15pm	Scientific Session IV, Tower Ballroom
12:15pm – 12:45pm	Presidential Address: Stephen F. Sener, MD, Tower Ballroom
12:45pm – 1:30pm	MSA Annual Business Meeting, Tower Ballroom

## WEDNESDAY, JULY 31, 2013

Guest Departures

# Family Program

---

## SUNDAY, JULY 28, 2013

12Noon – 6:00pm	MSA Registration Open, Tower Foyer
5:30pm – 6:00pm	New Member Reception, Peninsula A
6:00pm – 7:00pm	Welcome Reception, Pavilion
8:00pm – 10:00pm	Kids Movie Night (Ages 4-12 years), Peninsula B/C

## MONDAY, JULY 29, 2013

7:00am – 8:00am	Annual 5K Fun Run, Meet at Health Club
7:00am – 12:00pm	MSA Registration Open, Tower Foyer
9:00am – 2:30pm	Kids Program (payment required), meet at Peninsula B/C
9:30am – 12:30pm	Spouse Program: Canoeing and Kayaking on Boardman River Meet in Lobby by double doors for shuttle
1:30pm	Golf Outing – Wolverine Course – Shotgun Start
1:30pm	Tennis Outing – Resort Tennis Courts - Round Robin
6:00pm – 7:00pm	Cocktail Reception, Governor's Foyer
7:00pm – 11:30pm	Annual Banquet and Dinner Dance, Governor's A

## TUESDAY, JULY 30, 2013

7:00am – 12:00pm	MSA Registration Open, Tower Foyer
9:00am – 12:30pm	Kids Program (payment required), meet at Peninsula B/C
10:00am – 12:30pm	Spouse Program: Northwoods Walking Tour Meet in Lobby by double doors for shuttle
7:30pm – 10:30pm	Beach Party Event, Beach Club Deck

## WEDNESDAY, JULY 31, 2013

Guest Departures

*Note: Children are welcome at all social events.*

*NOTE: See MSA Registration Desk for additional details on recreational activities, babysitting services and optional activities.*







# SCIENTIFIC PROGRAM

# Scientific Program

---

**SUNDAY, JULY 28, 2013**

*12Noon – 6:00pm*

**Registration Open**

*9:00pm – 10:30pm*

**Spectacular Problems in Surgery**

Moderators: Stephen F. Sener, MD and Raymond P. Onders, MD

**EMERGENT INTRAOPERATIVE PULMONARY EMBOLCTOMY (OFF PUMP)  
DURING A LOWER LIMB AMPUTATION**

Osborne ZJ, Wheatley B, Dharamsy S, Rossi P, Aucar JA

Carle Foundation Hospital

**SURVIVING 1 IN 10 ODDS AFTER THORACOABDOMINAL PENETRATING  
TRAUMA: LAWNMOWERS, HELICOPTERS, AND MAYO CLINIC. A CASE REPORT**

Zhukov Y, Jenkins D

Mayo Clinic

**MASSIVE LOWER GASTROINTESTINAL BLEEDING FROM AN UNUSUAL SOURCE**

Tozzi F, Malik T, Ekeh AP

Wright State University

**APPENDICITIS N’EST PAS?**

Shroder D

St. John Hospital and Medical Center

**BOWEL OBSTRUCTION SECONDARY TO AN UNUSUAL INTERNAL HERNIA**

Blatnik JA, Wilhelm SM

University Hospitals Case Medical Center

**A RARE COMPLICATION AFTER ESOPHAGEAL DUPLICATION CYST EXCISION IN  
A PEDIATRIC PATIENT**

Bobanga ID, Robke JM, DeRoss AL

University Hospitals Case Medical Center

# Scientific Program continued

---

## MONDAY, JULY 29

*7:00am – 12Noon*

**Registration Open**

*8:00am – 12Noon*

**Exhibit Display Open**

*8:00am – 8:20am*

**Featured Posters**

Moderator: Anthony J. Senagore, MD, MS, MBA

*8:20am – 8:30am*

**Welcome & Introductions**

*8:30am – 9:30am*

**Scientific Session I**

Moderator: Nicholas Zyromski, MD and Katherine Liu, MD

*8:30am – 8:45am*

**1. MEDICARE POST-DISCHARGE DEATHS AND READMISSIONS FOLLOWING ELECTIVE SURGERY**

Fry DE, Pine M, Pine G

Northwestern University Feinberg School of Medicine

*8:45am – 9:00am*

**2. SHOULD ATYPIA OF UNDETERMINED SIGNIFICANCE BE SUBCLASSIFIED TO BETTER ESTIMATE RISK OF THYROID CANCER?**

Chen JC, Pace SC, Khiyami A, McHenry CR

MetroHealth Medical Center

*9:00am – 9:15am*

**3. SURGICAL PULMONARY EMBOLECTOMY IN A COMMUNITY HOSPITAL**

Osborne ZJ, Rossi P, Aucar J, Dharamsy S, Wheatley B

Carle Foundation Hospital

# Scientific Program continued

---

9:15am – 9:30am

## **4. POST-OPERATIVE SURVEILLANCE OF SMALL APPENDICEAL CARCINOID TUMORS**

Murray SE, Sippel RS, Lloyd R, Chen H, Oltmann SC  
University of Wisconsin

9:30am – 10:00am

## **Scott Woods Memorial Lecture**

### **“Personalized Medicine for Breast Cancer: It’s a New Day!”**

Introduction: Stephen F. Sener, MD  
Presenter: Christy A. Russell, MD  
University of Southern California

10:00am – 10:15am

## **Morning Break/Exhibits & Poster Viewing**

10:15am – 12:15pm

## **Scientific Session II: Resident Paper Competition**

Moderator: Stephen F. Sener, MD

10:15am – 10:30am

## **5. PREDICTING THE UNPREDICTABLE: COMPARING READMITTED VERSUS NON-READMITTED COLORECTAL SURGERY PATIENTS**

Keller DS, Swendseid B, Stein SL, Champagne BJ, Reynolds HL, Delaney CP  
University Hospitals Case Medical Center

10:30am – 10:45am

## **6. VALIDATION OF A RISK PREDICTION MODEL FOR MAJOR COMPLICATIONS FOLLOWING PANCREATODUODENECTOMY WITH PANCREATOGASTROSTOMY RECONSTRUCTION**

Weber C, Siddiqui Z, Berger E, Bock E, Hurtuk M, Pappas S, Abood G, Aranha G  
Loyola University Medical Center

10:45am – 11:00am

## **7. REPEAL OF MICHIGAN HELMET LAW: EARLY CLINICAL IMPACTS**

Titus RA, Chapman AJ, Ferencick H, Ribbens K, Burns K, Rodriguez C  
Grand Rapids Medical Education Partners / Michigan State University

## Scientific Program *continued*

---

*11:00am – 11:15am*

**8. THE DEPTH OF POST-TREATMENT SUBSEROSAL INVASION IS A PREDICTOR OF OUTCOME IN PATIENTS WITH CLINICAL STAGE III RECTAL CANCER TREATED WITH NEOADJUVANT CHEMORADIATION FOLLOWED BY SURGICAL RESECTION**

Brandt WS, Abood G, Hurtuk MG, Walther AE, Yong S, Micetich K, Shoup M  
Cadence Health and Loyola University Medical Center

*11:15am – 11:30am*

**9. ESOPHAGECTOMY IN PATIENTS WITH PRIOR PERCUTANEOUS GASTROSTOMY TUBE PLACEMENT**

Wright GP, Foster SM, Chung MH  
Grand Rapids Medical Education Partners / Michigan State University

*11:30am – 11:45am*

**10. LONG-TERM EFFICACY OF LAPAROSCOPIC CHOLECYSTECTOMY FOR THE TREATMENT OF BILIARY DYSKINESIA**

Luu MB, Veenstra BR, Deal RA, Daly SC, Redondo RE, Najman J, Myers JA, Millikan KW  
Rush University Medical Center

*11:45am – 12Noon*

**11. ANASTOMOTIC LEAKS: TECHNIQUE AND TIMING OF DETECTION**

Feo L, Jrebi N, Asgeirsson T, Dujovny N, Figg R, Hoedema R, Slay H, Kim D, Luchtefeld M  
Ferguson Clinic

*12Noon – 12:15pm*

**12. SYMPTOMATIC RECTOCELE: WHAT ARE THE INDICATIONS FOR REPAIR?**

Hall G, Shanmugan S, Noble T, Paspulati R, Delaney C, Reynolds H, Stein S, Champagne B  
University Hospitals Case Medical Center

*12:15pm – 1:00pm*

**William H. Harridge Memorial Lecture**

**“Carotid Endarterectomy vs. Stenting for Stroke Prevention: What We Have and Will Learn from CREST”**

Introduction: Stephen F. Sener, MD

Presenter: Fred A. Weaver, MD, MMM

University of Southern California Keck Hospital

# Scientific Program continued

---

## TUESDAY, JULY 30

7:00am – 8:30am

**Continental Breakfast**

7:00am – 12Noon

**Registration Open**

8:00am – 12Noon

**Exhibit Displays Open**

8:05am – 8:15am

**Welcome & Introductions**

8:15am – 10:15am

**Scientific Session III**

Moderator: Nicholas Zyromski, MD

8:15am – 8:30am

**13. ESOPHAGECTOMY OUTCOMES AT A MID VOLUME CANCER CENTER  
UTILIZING PROSPECTIVE MULTIDISCIPLINARY CARE AND A TWO-SURGEON  
TEAM APPROACH**

Pimiento JM, May M, Kemmeter P, Shabahang B, McCahill LE  
Lacks Cancer Center

8:30am – 8:45am

**14. OBESITY IN TRAUMA: OUTCOMES AND DISPOSITION TRENDS**

Osborne ZJ, Rowitz BM, Moore HR, Oliphant UJ, Olson MM, Aucar JA  
Carle Foundation Hospital

8:45am – 9:00am

**15. FINAL ANALYSIS OF THE PILOT TRIAL OF DIAPHRAGM PACING (DP) IN  
AMYOTROPHIC LATERAL SCLEROSIS (ALS) WITH LONG TERM FOLLOW-UP: DP  
POSITIVELY AFFECTS DIAPHRAGM RESPIRATION**

Onders RP, Katirji M, Elmo MJ, Kaplan C, Schilz R  
University Hospitals Case Medical Center

# Scientific Program continued

---

9:00am – 9:15am

**16. SURGICAL, ONCOLOGIC AND COSMETIC DIFFERENCES BETWEEN ONCOPLASTIC AND NON-ONCOPLASTIC BREAST CONSERVING SURGERY**

Dowell P, Topalovski T, Helmer SD, Tenofsky PL

The University of Kansas School of Medicine - Wichita

9:15am – 9:30am

**17. PERITONEAL SURFACE DISEASE SEVERITY SCORE (PSDSS) AS A PREDICTOR OF RESECTABILITY IN THE TREATMENT OF PERITONEAL SURFACE MALIGNANCIES**

Yoon WJ, Berri RN

St. John Hospital and Medical Center

9:30am – 9:45am

**18. THE EFFECT OF TIMING OF POSTMASTECTOMY RADIATION ON IMPLANT-BASED BREAST RECONSTRUCTION: A RETROSPECTIVE COMPARISON OF COMPLICATION OUTCOMES**

Collier P, Chan S, Williams J, Busuito M, Edhayan E

St. John Hospital and Medical Center

9:45am – 10:00am

**19. PEDIATRIC MELANOMA IN NEW MEXICO (NM) AMERICAN INDIANS, HISPANICS, AND NON-HISPANIC WHITES, 1981-2009**

Faizi SA, Meisner A, Nir I, Morris KT, Russell JC, Wiggins C, Rajput A

University of New Mexico

10:00am – 10:15am

**20. PRELIMINARY RESULTS OF FENESTRATED AORTIC GRAFTS**

Liao TH, Mansour MA, Cuff RF, Kosovec M, Chambers CM, Slaikeu JD, Wong PY

Grand Rapids Medical Education Partners / Michigan State University

10:15am – 10:30am

**Morning Break and Poster Viewing**

# Scientific Program continued

---

10:30am – 12:15pm

## Scientific Session IV

Moderator: William C. Cirocco, MD

10:30am – 10:45am

### 21. INCREMENTAL COST OF COMPLICATIONS IN COLECTOMY: A POTENTIAL GUIDE FOR QUALITY IMPROVEMENT

Asgeirsson T, Jebri N, Feo L, Luchtefeld M, Senagore AJ  
Spectrum Health

10:45am – 11:00am

### 22. TRAUMA RECIDIVISTS: SURPRISINGLY BETTER OUTCOMES THAN NON-RECIDIVISTS

Como JJ, Dixon SD, Banerjee A, Claridge JA  
MetroHealth Medical Center

11:00am – 11:15am

### 23. BIOLOGICS IN VENTRAL HERNIA RECONSTRUCTION

Iacco A, Adeyemo A, Riggs T, Janczyk R  
Beaumont Health System

11:15am – 11:30am

### 24. CAN ULTRASOUND COMMON BILE DUCT DIAMETER PREDICT COMMON BILE DUCT STONES IN THE SETTING OF ACUTE CHOLECYSTITIS?

Boys JA, Doorly MG, Zehetner J, Dhanireddy KK, Senagore AJ  
Los Angeles County and University of Southern California Hospitals

11:30am – 11:45am

### 25. OBSTRUCTIVE SLEEP APNEA IN GENERAL SURGERY PATIENTS: IS IT MORE COMMON THAN WE THINK ?

Sarker S, Kulkarni GV, Horst A, Eberhardt JM, Kumar S  
Loyola University Medical Center

11:45am – 12Noon

### 26. MASSIVE PANNICULECTOMY RESULTS IN IMPROVED FUNCTIONAL OUTCOME

Debord JR, Evans CR, Marshall JS, Rossi TR, Howe HL, Owolabi M  
University of Illinois College of Medicine



## Scientific Program *continued*

---

*12Noon – 12:15pm*

**27. PERMANENT MESH RESULTS IN LONG-TERM SYMPTOM IMPROVEMENT  
AND PATIENT SATISFACTION WITHOUT INCREASING ADVERSE OUTCOMES IN  
HIATAL HERNIA REPAIR**

Petersen LP, McChesney SL, Daly SC, Millikan KW, Myers JA, Luu MB

Rush University Medical Center

*12:15pm – 12:45pm*

**Presidential Address: Stephen F. Sener, MD**

**Has Medical Diplomacy Reached an Inflection Point?**

*12:45pm – 1:30pm*

**MSA Annual Business Meeting**





# ABSTRACTS

# Scientific Paper Abstracts

---

## 1. MEDICARE POST-DISCHARGE DEATHS AND READMISSIONS FOLLOWING ELECTIVE SURGERY

Fry DE, Pine M, Pine G

Northwestern University Feinberg School of Medicine

**Objective:** The frequency and clinical associations of post-discharge deaths and readmissions following elective surgical procedures remain poorly understood. Premature discharge, poor discharge planning, and inadequate post-discharge care have been implicated as causes. We evaluated risk-adjusted post-operative length of stay (RApoLOS) as a sensitive measure of significant inpatient complications, for the prediction of post-discharge deaths and readmissions.

**Methods:** The Medicare MedPar database for 2009-2010 was used to develop inpatient RApoLOS prediction models for live discharges in 21 categories of elective surgical procedures. Age, gender, and medical comorbidities were used as independent variables in model development. Moving average control charts were used within each elective surgical category to define RApoLOS outliers ( $> 3$  sigma). The relationships between RApoLOS outliers and all post-discharge deaths and all readmissions within 90 days of discharge were assessed.

**Results:** The inpatient mortality rate was 0.54%. Of 2,054,189 live discharges, 147,292 (7.17%) were RApoLOS outliers. There were 14,657 (0.71%) post-discharge deaths and 187,566 (9.13%) readmissions. RApoLOS outliers had a 3.46% death rate and 16.69% rate of readmission, while those found not to be RApoLOS outliers had a 0.5% death rate and a 8.55% readmission rate ( $P < 0.0001$ ).

**Conclusions:** RApoLOS outliers have increased rates of post-discharge deaths and readmissions. Inpatient morbidity from the index operation predicts post-discharge adverse events and require focused attention for the prevention of post-discharge deaths and readmissions.

### 2. SHOULD ATYPIA OF UNDETERMINED SIGNIFICANCE BE SUBCLASSIFIED TO BETTER ESTIMATE RISK OF THYROID CANCER?

Chen JC, Pace SC, Khiyami A, McHenry CR  
MetroHealth Medical Center

**Objective:** In the Bethesda System for Reporting Thyroid Cytopathology, atypia of undetermined significance (AUS) is a heterogeneous category used for nodules that are neither definitively benign, neoplastic nor malignant. Repeat fine needle aspiration biopsy (FNAB) is recommended in 3-6 months, although significant variation in rates of malignancy has been reported. The objective of this study was to determine whether specific cytologic features are associated with different rates of malignancy in AUS.

**Methods:** All FNAB specimens categorized as AUS from 2010 to 2012 were re-analyzed for degree of cellularity; nuclear overlapping, grooves and inclusions; amount of thin and thick colloid; and number of microfollicles. Cytopathologists were blinded to the original FNAB interpretation, clinical findings and final pathology. Specific cytologic features were correlated with final pathology.

**Results:** Seventy-six patients had AUS; 43 (57%) underwent surgery with a malignancy rate of 19%. Specimens with moderate/large amount of thin colloid were more likely benign (87% vs. 75%,  $p=0.29$ ). Moderate/large amount of thin colloid and absent/few nuclear inclusions and/or grooves had >88% rate of benign disease. A moderate/high number of nuclear grooves or inclusions was associated with a higher rate of cancer (100% vs. 13%,  $p=0.0039$ ; 63% vs. 10%,  $p=0.0024$ ). Nuclear overlapping was not associated with malignancy (16% vs. 16%,  $p=1.00$ ). Degrees of Hürthle cells, microfollicles and cellularity did not vary significantly between neoplastic and non-neoplastic disease.

**Conclusions:** Patients with AUS and more than rare nuclear inclusions and/or grooves are at higher risk for cancer and should forego repeat FNAB and undergo thyroidectomy.

### 3. SURGICAL PULMONARY EMBOLECTOMY IN A COMMUNITY HOSPITAL

Osborne ZJ, Rossi P, Aucar J, Dharamsy S, Wheatley B  
Carle Foundation Hospital

**Objective:** Massive pulmonary embolism (PE) is frequently associated with a high mortality. Surgical pulmonary embolectomy (SPE) may be considered for patients with a PE associated with hemodynamic instability and who have a contraindication to systemic or catheter-directed anticoagulation. A review of the literature demonstrates most studies on SPE are from large academic medical centers. Our series is from a 325 bed community hospital.

**Methods:** A retrospective review was performed on patients undergoing a SPE between January 2008 to December 2012. The hospital electronic medical record and administrative records were reviewed for all patients over the age of 18 who underwent a SPE. The 30-day mortality, length of hospital stay, comorbidities, and pre-operative hemodynamic parameters are reported. Our hospital has a designed algorithm and multidisciplinary approach to all massive PEs.

**Results:** 14 patients (7 male and 7 female, median age: 55.5 years, age range of 21-72) underwent SPE. Eight emergent (57.1%) and six salvage (42.9%) embolectomies were performed. There was one death (1/14). This was a young female with a recurrent massive PE who underwent her second pulmonary embolectomy at the time of her death. Four of the patients had catheter-directed interventions attempted prior to SPE. One PE was diagnosed intraoperatively. The mean length of hospital stay was 12 days.

**Conclusions:** While indications for surgical pulmonary embolectomy remain controversial, our data demonstrate that surgical embolectomies are associated with reasonable outcomes in the community hospital. Furthermore, the mortality rate in our series compares favorably with the previous reported rates of 30%.

### 4. POST-OPERATIVE SURVEILLANCE OF SMALL APPENDICEAL CARCINOID TUMORS

Murray SE, Sippel RS, Lloyd R, Chen H, Oltmann, SC  
University of Wisconsin

**Objective:** While there is general agreement that appendectomy alone is sufficient for appendiceal carcinoids <1 cm, the necessity and frequency of post-operative surveillance is unclear. The aim of this study was to determine appropriate follow-up surveillance for these patients.

**Methods:** This was a retrospective analysis of patients with appendiceal carcinoids <1 cm in diameter evaluated at a tertiary center between 1993 and 2011. Information collected included patient and tumor characteristics, clinical presentation, treatment, surveillance, recurrence, and survival.

**Results:** Of 26 patients analyzed, the mean age was  $35 \pm 16$  years and 88% were female. All tumors were incidentally found during surgery, with the most common indications being acute appendicitis (n=12), ulcerative colitis (n=4), and pelvic mass (n=4). 13 patients (50%) had only an appendectomy at initial operation. The mean tumor diameter was  $4.4 \pm 2.3$  mm. One patient had mesoappendiceal involvement, however, no lymph node (LN) or distant metastases were observed. One patient with a 3 mm tumor had a subsequent completion right hemicolectomy for a peri-cecal mass concerning for recurrence though final pathology revealed a mucocele. 11 patients (42%) had follow-up surveillance, including  $\geq 1$  of the following: medical oncology referral (n=4), imaging (n=6), labs (chromogranin A, 5-hydroxyindoleacetic acid) (n=5), or colonoscopy (n=3). There were no recurrences or disease-specific deaths during a mean follow-up period of  $5.6 \pm 4.3$  years.

**Conclusions:** In this series encompassing an 18-year period, we demonstrate that appendiceal carcinoids <1 cm treated by simple appendectomy are unlikely to recur. Therefore, post-operative surveillance in the form of repeat imaging or labs may be unnecessary.

## 5. PREDICTING THE UNPREDICTABLE: COMPARING READMITTED VERSUS NON-READMITTED COLORECTAL SURGERY PATIENTS

Keller DS, Swendseid B, Stein SL, Champagne BJ, Reynolds HL, Delaney CP  
University Hospitals Case Medical Center

**Objective:** Unplanned readmissions after colorectal surgery are common, unpredictable, and costly. Our goal was to evaluate readmissions at our institution to determine predictors and patterns of readmission.

**Methods:** Review of a prospective departmental database was performed from 2006-2012. Patients were stratified into non-readmitted and readmitted within 30 days of the index procedure. Preoperative, perioperative, and postoperative factors for the index admission and readmission were included in the analysis.

**Results:** 212 readmissions and 3,769 non-readmissions were included in the analysis. Most cases were elective (82.6% of readmitted, 84.4% of non-readmitted) and performed for colorectal cancer (43% of readmitted, 39% of non-readmitted). The most common procedure was segmental colectomy (48% of readmitted, 38% of non-readmitted). The non-readmitted group had more laparoscopic cases (84.3% versus 35.8%). Readmitted patients were significantly older ( $p=0.0026$ ), had more co-morbidities (Charlson Score [ $p=0.0028$ ], ASA class [ $p<0.0001$ ], modified frailty index [ $p<0.0001$ ]), longer operative times ( $p<0.0001$ ), and intra-operative blood loss ( $p<0.0001$ ). The readmitted group had a longer index hospital length of stay ( $p<0.0001$ ). At discharge, more readmitted patients required home care services (11.3% vs. 5.4%) and temporary nursing home care (12.3% vs. 7.8%).

**Conclusions:** Readmitted patients have distinct pre-operative demographic, peri-operative, and post-operative outcomes variables from non-readmitted patients. As the majority of readmissions were elective cases, stratifying patients pre-operatively may enable perioperative planning for this higher risk group. Modifying discharge criteria based on demographics, operative time, blood loss, and length of stay may also help predict and plan for patients at risk for readmission.



### 6. VALIDATION OF A RISK PREDICTION MODEL FOR MAJOR COMPLICATIONS FOLLOWING PANCREATICODUODENECTOMY WITH PANCREATICOGASTROSTOMY RECONSTRUCTION

Weber C, Siddiqui Z, Berger E, Bock E, Hurtuk M, Pappas S, Abood G, Aranha G  
Loyola University Medical Center

**Objective:** To determine the applicability of a previously validated risk prediction model for major-complications after pancreaticoduodenectomy (PD) with pancreaticojejunostomy (PJ) in a cohort of patients undergoing pancreaticogastrostomy (PG).

**Methods:** A retrospective chart review of patients who underwent PD with PG at a single institution from 2/1998-10/2012. Patient demographics, postoperative outcomes, and cancer-related outcomes were recorded. Risk assessment was assigned a range from 0-17 based on ASA class, operative blood loss, pancreas texture, and pancreatic duct size as previously described by Braga et al. Major-complications analyzed were levels III-V of the Clavien-Dindo classification of postoperative complications.

**Results:** We identified 282 patients, 157 (56%) were males. The mean age was 65.6 (21-89). Pancreatic adenocarcinoma (45%) represented the largest indication for operation. The predominant ASA score was 3(67%), the pancreas was soft in 57%, the duct was <3mm in 49.5%, and the operative blood loss was >700ml in 64%. Percentages of patients who developed a major-complication with risk scores of 0-3, 4-7, 8-11, and 12-15 were 0%, 7.6%, 12.6%, and 28%, respectively. Of the 36 major-complications, 16.7% occurred in patients with a risk score of 4-7, 44.4% with a risk score of 8-11, and 38.9% with a risk score of 12-15. Overall survival was 80%, 54%, and 45% at 1 year, 3 years, and 5 years, respectively.

**Conclusions:** Despite a higher percentage of ASA class 3, representing a more functionally limited population, the risk prediction model for major complications remains a valid tool in a model of PG reconstruction following PD.

## 7. REPEAL OF MICHIGAN HELMET LAW: EARLY CLINICAL IMPACTS

Titus RA, Chapman AJ, Ferencick H, Ribbens K, Burns K, Rodriguez C  
Grand Rapids Medical Education Partners / Michigan State University / Michigan State University

**Objective:** Motorcycle helmet laws have generated controversy for decades. Studies have demonstrated higher mortality rates among unhelmeted motorcyclists, increased incidence of head injuries, and greater hospital costs. Despite this evidence, the State of Michigan repealed a 35 year mandatory helmet law in April, 2012. Our study examines the early clinical and financial impacts of this change at a level 1 trauma center in West Michigan.

**Methods:** This is a retrospective cohort study assessing outcomes in motorcycle crash victims in a 7 month period before and after the helmet law repeal. Chart review was used to determine helmet status, mortality, Injury Severity Scale (ISS), Abbreviated Injury Scale (AIS) head, ICU length of stay (LOS), hospital LOS, mechanical ventilation time, admission Glasgow Coma Score (GCS), cost of stay and disposition.

**Results:** 192 patients were included in the study. Unhelmeted riders rose significantly from 7% to 29% after the repeal. There was no difference in mortality after admission, however, there was a significant increase in crash scene fatalities following the repeal (p-value of 0.017). ICU LOS and mechanical ventilation time were found to be significantly higher in the unhelmeted cohort (p-value of .020 and .015, respectively). The median hospital charge was \$11,000 higher for unhelmeted riders (p-value 0.022).

**Conclusions:** Our study highlights the negative ramifications of repealing the mandatory helmet law including: decreased helmet use, increased crash scene mortalities, longer ICU stay and ventilator time, and higher medical costs. These findings are concerning, especially as the repeal is only in its infancy.

### 8. THE DEPTH OF POST-TREATMENT SUBSEROSAL INVASION IS A PREDICTOR OF OUTCOME IN PATIENTS WITH CLINICAL STAGE III RECTAL CANCER TREATED WITH NEOADJUVANT CHEMORADIATION FOLLOWED BY SURGICAL RESECTION

Brandt WS, Abood G, Hurtuk MG, Walther AE, Yong S, Micetich K, Shoup M  
Cadence Health and Loyola University Medical Center

**Objective:** In patients undergoing neoadjuvant chemoradiation, it is unclear whether microscopic invasion (<5mm) into the subserosa portends a different survival outcome when compared to patients with deeper invasion (>5mm) of the subserosa on the post-treatment resected specimen. The purpose of this study is to determine whether depth of invasion correlates with long-term survival.

**Methods:** A retrospective review of 62 consecutive patients who underwent neoadjuvant chemoradiotherapy for stage III rectal cancer from 1998 to 2008. Clinicopathologic data and cancer related outcomes were collected after resection. Pathology was re-reviewed by a single pathologist for depth of subserosal invasion (<5mm or >5mm), pathological stage, presence of K-Ras mutations and lymph node involvement.

**Results:** Complete records were available for 58 (94%) patients, with a median follow-up of 58.5 months. The median age was 73years (range 40-95years) with 53% male. Patients with tumor extending >5mm into the subserosa had a higher percentage of recurrence after resection (50% vs 32%), worse disease-specific survival (50% vs. 77%), and decreased overall survival when compared to those with <5mm of subserosal invasion (17% vs. 50%). Other clinicopathological factors, including K-Ras status, did not significantly impact these outcome.

**Conclusions:** Depth of post-treatment tumor invasion into the subserosa correlates with recurrence and overall survival in patients undergoing neoadjuvant therapy in patients with stage III rectal cancer. Therefore, it is important to take into consideration not just the depth of invasion, but specifically the degree of invasion within the subserosa when assessing for optimal staging, prognosis and post-resection therapy.

### 9. ESOPHAGECTOMY IN PATIENTS WITH PRIOR PERCUTANEOUS GASTROSTOMY TUBE PLACEMENT

Wright GP, Foster SM, Chung MH

Grand Rapids Medical Education Partners / Michigan State University / Michigan State University

**Objective:** Esophagectomy remains the curative therapy for early esophageal carcinoma. We examined the impact of preoperative percutaneous gastrostomy (PG) tube placement in patients undergoing esophagectomy.

**Methods:** A retrospective review was performed of all patients who underwent esophagectomy from 6/1/05 through 12/31/12 at a single institution. Patients were analyzed in two groups based on whether or not they had preoperative PG placement. Surgical morbidity was graded according to the Clavien-Dindo classification. Targeted outcome measures were suitability of the gastric conduit and leak rates the PG site and esophagogastric anastomosis.

**Results:** One hundred eighteen patients included for study, 103 without (PG-) and 15 with (PG+) prior PG tube placement. Overall morbidity and mortality rates were 36.4% and 0.9% respectively. There were no significant differences in demographics, preoperative diagnosis, length of stay, morbidity or mortality rates between groups. The PG+ group had a lower proportion of Ivor-Lewis and higher proportion of three-field esophagectomies ( $p=0.02$ ) and a higher rate of neoadjuvant therapy (100% vs. 55.3%,  $p<0.01$ ). The use of a gastric conduit was similar between groups (94.2% PG- vs. 87.7% PG+,  $p=0.27$ ), and presence of a prior PG was not prohibitive of using the gastric conduit in any case. Anastomotic leak rates were similar between groups (10.7% PG- vs. 13.3% PG+,  $p=0.67$ ), and there were no leaks from previous PG sites.

**Conclusions:** It appears that preoperative PG tube placement has no adverse effect on performance of esophagectomy. Preoperative PG could therefore be considered in highly selected patients with poor nutritional status.

### 10. LONG-TERM EFFICACY OF LAPAROSCOPIC CHOLECYSTECTOMY FOR THE TREATMENT OF BILIARY DYSKINESIA

Luu MB, Veenstra BR, Deal RA, Daly SC, Redondo RE, Najman J, Myers JA, Millikan KW  
Rush University Medical Center

**Objective:** Laparoscopic cholecystectomy (LC) is the treatment of choice for biliary dyskinesia (BD), but its long-term outcomes are not well known. The purpose of this study is to evaluate the long-term success of LC to improve symptoms of BD.

**Methods:** A retrospective review of patients diagnosed with biliary dyskinesia and treated with laparoscopic cholecystectomy at a single institution between 2001 and 2012 was conducted. Patients were identified by ICD-9 codes and those with abnormal liver function tests (LFTs), cholelithiasis, or acute cholecystitis were excluded. Patient demographics and perioperative outcomes were collected and an unpaired student T test was performed. Long-term outcome data was obtained by telephone interview using a modified Likert scale.

**Results:** Sixty-seven patients met inclusion criteria, of which thirty-four patients (51%) had long-term follow-up data. Mean time to follow-up was 65 months (6-134). The mean age of our cohort was 41 years (18-73). The majority were female (94%, n=32) and Caucasian (71%, n=24). All patients had an ejection fraction (EF) less than 35% on hepatobiliary iminodiacetic acid (HIDA) scan, with a mean of EF 13.6% (0%-32%). Long-term follow-up demonstrated symptom response in 88% (n=30) of patients (responders), compared to no response in 12% (n=4) (non-responders). Responders underwent a mean of 1.56 preoperative diagnostic procedures, compared to a mean of 2.5 for non-responders (p= 0.01). The mean EF for responders was 15% compared to 6.7% for non-responders (p=0.11).

**Conclusions:** This represents the longest follow-up study demonstrating the success of LC to improve symptoms in patients with BD.

### 11. ANASTOMOTIC LEAKS: TECHNIQUE AND TIMING OF DETECTION.

Feo L, Jrebi N, Asgeirsson T, Dujovny N, Figg R, Hoedema R, Slay H, Kim D, Luchtefeld M  
Ferguson Clinic

**Objective:** The present study looks at the overall rates of complications and timing of anastomotic leak detection comparing laparoscopy vs. open colorectal cases for index operation.

**Methods:** Retrospective chart review was performed looking at elective and emergent segmental colectomies within our institution over a 5 year timeframe from July 2008 to July 2012. The procedures were divided into two groups. (Laparoscopic vs. open). We compared the rate of complications between the groups and specifically the anastomotic leaks requiring surgical intervention, emphasizing the time window between the primary surgery and reexploration in both groups. Statistical analysis was performed with paired t-test and chi-square with significance set at 0.05 (p value < 0.05)

**Results:** A total of 1424 segmental colectomies (Laparoscopic N = 654, Open N = 770). The analysis of the overall rate of complications between the two groups was statically significant. (Complication count average: Laparoscopic = 0.26 +/- 0.03 vs. Open = 1.15 +/- 0.08 p value < 0.001). The anastomotic leak rates did not differ between the groups (Leak rate: Laparoscopic 12/654 (1.18%) vs. Open : 12/770 (1.6%) p value 0.69). In terms of timing of leak detection no difference was noticed (Laparoscopic = 8.6 +/- 11.6 days vs. Open = 11.2 +/- 16.7 days. p value = 0.67). The mortality rate was equal between the groups with one deceased patient each.

**Conclusions:** The timing of anastomotic leak detection does not differ between laparoscopy and open segmental colorectal resection. Despite the overall Morbidity was statically significant between the groups.

### 12. SYMPTOMATIC RECTOCELE: WHAT ARE THE INDICATIONS FOR REPAIR?

Hall G, Shanmugan S, Noble T, Paspulati R, Delaney C, Reynolds H, Stein S, Champagne B  
University Hospitals Case Medical Center

**Objective:** Symptomatic rectocele is a common presentation in the outpatient clinic. However, the indications for repair are nebulous and recurrence rates are high. We developed a novel protocol with dynamic Magnetic Resonance Imaging Defecography (MRID) to evaluate the functional anatomy of the pelvic floor. The objective of this study is to determine if utilizing both clinical presentation and dynamic MRID with selective criteria for repair improves outcomes.

**Methods:** All patients with constipation and pelvic outlet obstruction symptoms underwent MRID. Imaging was performed while the patient was squeezing, straining, and during evacuation. Surgical repair was offered if defecation required manual assistance and the MRID revealed: a defect greater than 2 cm, incomplete evacuation, and an absence of perineal descent. The primary outcomes were recurrence and quality of life.

**Results:** From September 2006 to October 2012 118 patients with symptoms of constipation and pelvic outlet obstruction underwent MRID. Of these, 63 (54%) had a rectocele and 37 (31%) patients had evidence of perineal descent. 13 (18%) of the rectocele patients met the above criteria for repair. With a median follow-up of 29 months, Quality of Life (QOL) scores improved from 54.4 to 86.5 ( $p=0.038$ ). There was 1 recurrence.

**Conclusions:** The majority of patients with symptoms of pelvic outlet obstruction had a rectocele but only a minority of these patients (18%) met criteria for repair. Utilizing dynamic MRID and a selective treatment approach for rectocele repair results in low recurrence rates and improved QOL.

### 13. ESOPHAGECTOMY OUTCOMES AT A MID VOLUME CANCER CENTER UTILIZING PROSPECTIVE MULTIDISCIPLINARY CARE AND A TWO-SURGEON TEAM APPROACH

Pimiento, JM, May, M, Kemmeter P, Shabahang, B, McCahill, LE  
Lacks Cancer Center

**Objective:** Esophagectomy is associated with high morbidity and mortality, leading for calls for limited practice. In Ontario Canada performance has been restricted to higher volume centers with anticipation for improved outcomes. Rather than volume assessment alone, we have chosen to prospectively monitor detailed operative outcomes at our mid volume center and benchmark outcomes.

**Methods:** All patients had esophageal cancer and were evaluated prospectively in a multidisciplinary tumor board and clinic from 1/2010-12/2012. Surgery was performed utilizing a two-surgeon team approach and outcomes were assessed prospectively by a nurse quality specialist and entered into a database.

**Results:** Thirty-one patients underwent esophagectomy at our institution; 81% were male, median age was 64 years (35 – 83 y); and 81% had adenocarcinoma. Neoadjuvant chemoradiation was utilized in 81% patients. Surgical approach was laparoscopic transhiatal in 20 (65%) and Ivor-Lewis in 11(35%). Median EBL was 400 cc and transfusion rate was 9.6%. R0 resection was achieved in 29(93%) and median nodes evaluated was 14. Clavien-dindo major complications (grade III-V) occurred in 42% and did not correlate with surgical technique; anastomotic leak occurred in 5(16%), major pulmonary complications in 8(26%) and cardiac complications in 2(6.5%) Median LOS was 10 days, readmission rate was 22%, and 30-day mortality was 6.5%

**Conclusions:** High quality esophagectomy can be performed at a mid volume cancer center incorporating a high utilization of neoadjuvant therapy and two-surgeon approach. Our surgical outcomes appear to match higher volume centers and question the reliance on volume alone as a marker of cancer surgical quality.



## Scientific Paper Abstracts continued

---

### 14. OBESITY IN TRAUMA: OUTCOMES AND DISPOSITION TRENDS

Osborne ZJ, Rowitz BM, Moore HR, Oliphant UJ, Olson MM, Aucar JA  
Carle Foundation Hospital

**Objective:** The effect of obesity on the morbidity and mortality of trauma patients remains inconclusive. This study evaluated the effect of BMI on the outcomes of trauma patients.

**Methods:** A retrospective review of all falls, motor vehicle collisions (MVCs) and penetrating trauma patients admitted from January 2008 until December 2012 was performed. Pregnant patients, burn victims and children were excluded. Outcomes evaluated included mortality, length of hospital stay (LOS), and discharge disposition. Patients were grouped according to body mass index (BMI) and stratified according to the injury severity score (ISS). Statistical analysis included a Cochran-Armitage Trend Test.

**Results:** Of the 3768 patients meeting criteria for review, 2196 could be stratified. This included 132 penetrating traumas, 913 falls and 1151 MVCs. In the penetrating traumas, there was no significant difference in mortality, LOS or disposition. In the falls group, higher BMI was associated with decreased mortality in the moderate and severe ISS cohorts ( $p=0.016$ , and  $0.018$ ); while LOS increased with increasing BMI for the moderately injured ( $p=0.038$ ). In MVCs, there was no significant difference in mortality based on BMI; however, the LOS increased as BMI increased for moderately injured patients ( $0.027$ ), and patients with higher BMIs were less likely to be discharged to home for mild and moderate ISS groups ( $p=0.032$ , and  $0.003$ ).

**Conclusions:** Trauma outcomes vary with mechanism when stratified for BMI. In falls, a higher BMI may benefit patients. However, increasing BMI is associated with a decreased likelihood of return to home upon discharge after MVC.

### 15. FINAL ANALYSIS OF THE PILOT TRIAL OF DIAPHRAGM PACING (DP) IN AMYOTROPHIC LATERAL SCLEROSIS (ALS) WITH LONG TERM FOLLOW-UP: DP POSITIVELY AFFECTS DIAPHRAGM RESPIRATION

Onders RP, Katirji M, Elmo MJ, Kaplan C, Schilz R  
University Hospitals Case Medical Center

**Objective:** Respiratory insufficiency is the major cause of mortality in ALS. Alternate respiratory therapy is needed. The objective is to analyze safety and long term utility of the diaphragm pacing (DP) in the pilot FDA trial.

**Methods:** Patients underwent laparoscopic diaphragm mapping with electrode implantation. Electrodes were programmed and diaphragm conditioning was initiated. Patients had three lead-in and post-implant assessments that included a battery of respiratory physiologic testing.

**Results:** Twenty patients entered the study with 16 patients meeting inclusion criteria for implantation with no long term device related adverse events. Patients were: average age 50 (32-70), symptom onset was median 35 months at enrollment with mean ALSFRr of 27 and FVC of 60% at surgery. There were 352 implant-months of follow-up. Median tracheostomy-free survival was 18.6 months from implant, 43.4 months from diagnosis and 56 months from onset. DP increased diaphragm excursion and muscle thickness (p-value 0.02). Paired FVC rate of decline (treatment - lead in) improved with DP  $1.47 \pm 2.18\%$  per month (p=.03). Seven patients never used NIV. Eight used DP to overcome central sleep apnea. All patients expired. Cause of death or tracheostomy mechanical ventilation included respiratory failure (5), fall (1) aspiration (3), peri-operatively (spinal fixation) (1), urosepsis (1), colon cancer (1) and terminal wean of diaphragm pacing (4).

**Conclusions:** Long-term data suggests that DP is safe and positively influences diaphragm physiology and survival in ALS. This was fundamental for the multi-center pivotal trial leading to FDA approval for a new therapy for ALS patients.

### 16. SURGICAL, ONCOLOGIC AND COSMETIC DIFFERENCES BETWEEN ONCOPLASTIC AND NON-ONCOPLASTIC BREAST CONSERVING SURGERY

Dowell P, Topalovski T, Helmer SD, Tenofsky PL

The University of Kansas School of Medicine - Wichita

**Objective:** The purpose of this study was to compare immediate and long-term complications of oncoplastic and non-oncoplastic breast conserving surgeries.

**Methods:** A retrospective review was conducted of patients treated with breast conservation surgery, either oncoplastic or non-oncoplastic, from December 1, 2006 through April 30, 2011. Multiple variables were collected for analysis including both immediate and long-term consequences.

**Results:** Of 142 patients, 58 had oncoplastic lumpectomy (40.8%). Oncoplasty patients were younger than non-oncoplasty patients (60.9 vs. 65.2 years,  $p=0.043$ ). Immediate complications were similar between the two groups with the exception of non-healing wounds (oncoplastic = 8.6% vs. non-oncoplastic = 1.2%,  $p=0.042$ ). With regard to long-term consequences, cosmetic complaints and skin retraction were similar between the groups, but fat necrosis was more common in the oncoplastic group (25.9% vs. 9.5%,  $p=0.009$ ). Regardless of an increased incidence of non-healing wounds and fat necrosis in the oncoplastic group, time to radiation and number of post-procedure biopsies were not different between oncoplastic and non-oncoplastic patients.

**Conclusions:** This analysis only showed minor differences in the immediate and long-term complications among the two groups with no deleterious effects related to interval to radiation therapy, additional biopsies or recurrences; therefore, oncoplastic lumpectomy is a safe alternative for selected breast cancer patients.

### 17. PERITONEAL SURFACE DISEASE SEVERITY SCORE (PSDSS) AS A PREDICTOR OF RESECTABILITY IN THE TREATMENT OF PERITONEAL SURFACE MALIGNANCIES

Yoon WJ, Berri RN

St. John Hospital and Medical Center

**Objective:** Complete cytoreduction is a precondition for the application of hyperthermic intraperitoneal chemotherapy (HIPEC). We sought to evaluate the clinical utility of the Peritoneal Surface Disease Severity Score (PSDSS) as a preoperative predictor of complete resectability in the treatment of peritoneal surface malignancies (PSM).

**Methods:** Between October 2011 and January 2013, 36 patients with PSM were selected for cytoreductive surgery (CRS) plus HIPEC at our institution and were included in this study. All perioperative data were collected prospectively and the patients were stratified according to the PSDSS retrospectively.

**Results:** Out of 38 cytoreductive surgery performed, which included 2 second-look surgery, complete cytoreduction was achieved in 24 cases (63.2%). In this group of patients treated with CRS followed by HIPEC, 5 patients were scored as PSDSS Stage I (20.8%), 10 patients as PSDSS Stage II (41.7%), 3 patients as PSDSS stage III (12.5%), and 6 patients as PSDSS Stage IV (25.0%). Overall, 62.5% of the patients in whom cytoreduction was complete were classified as PSDSS Stage I/II. Contrastingly, all patients in whom complete cytoreduction was unachievable and who thereby were not treated with HIPEC were scored as PSDSS stage III/IV; 7 patients were scored as PSDSS Stage III (58.3%) and 5 patients as PSDSS Stage IV (41.7%).

**Conclusions:** The outcomes of our initial experience suggest that the PSDSS can be used as a preoperative assessment tool to predict disease resectability in the treatment of peritoneal surface malignancies.

### 18. THE EFFECT OF TIMING OF POSTMASTECTOMY RADIATION ON IMPLANT-BASED BREAST RECONSTRUCTION: A RETROSPECTIVE COMPARISON OF COMPLICATION OUTCOMES

Collier P, Chan S, Williams J, Busuito M, Edhayan E  
St John Hospital and Medical Center

**Objective:** The optimal timing of postmastectomy radiation for women undergoing tissue expander placement with delayed permanent implant exchange continues to remain controversial. Our objective is to compare complication rates when tissue expanders are exchanged for permanent implants pre- versus post-radiation.

**Methods:** A retrospective review of 45 consecutive patients who underwent implant-based breast reconstruction and received post-mastectomy radiation was conducted. Complications including infection, hematoma, wound dehiscence, flap necrosis, capsular contracture, and reoperation rate were compared between the two groups.

**Results:** Of the 45 patients studied, 15 received radiation before permanent implant exchange while 30 patients had permanent implants placed after cessation of radiation. Overall complication rates did not differ significantly between the two groups ( $p = 0.284$ ). That said, reoperation rate and wound dehiscence did approach significance. The reoperation rate was 44.4% for those who received radiation after compared to 19.5% for those who received radiation before permanent implant exchange ( $p = 0.061$ ) while the wound dehiscence rate was 11.1% versus 0% ( $p = 0.086$ ).

**Conclusions:** In our study of 45 patients, the timing of radiation did not significantly affect individual complication rates for patients who underwent implant-based breast reconstruction after immediate tissue expander placement. That said, reoperation and wound dehiscence rates did show a trend towards improvement in the patients that had radiation treatment before placement of permanent implants.

### 19. PEDIATRIC MELANOMA IN NEW MEXICO (NM) AMERICAN INDIANS, HISPANICS, AND NON-HISPANIC WHITES, 1981-2009

Faizi SA, Meisner A, Nir I, Morris KT, Russell JC, Wiggins C, Rajput A  
University Of New Mexico

**Objective:** The incidence of melanoma is increasing in the US and the diagnosis is often delayed in children. The purpose of this study was to determine the incidence of melanoma in NM American Indian, Hispanic and non-Hispanic white children.

**Methods:** A retrospective review of the NM Tumor Registry was conducted. Incident cases of melanoma diagnosed in NM residents <19 years of age between 1981-2009 were identified. Average annual age-adjusted incidence rates/million were calculated by the direct method using the US 2000 standard population.

**Results:** 64 cases of melanoma were diagnosed. Rates for Non-Hispanic whites were 7.41/million, 2.14/million for Hispanics and 3.17/million for American Indians. None were diagnosed in other racial/ethnic groups. There were 38 (59%) females. 15 cases (23%) were head/neck; 18 (28%) truncal, 13 (20%) upper extremity, 15 (23%) lower extremity, 2(3%) ocular and 1 (1.6%) was an unspecified cutaneous site. 55 (86%) cases were localized with no satellite lesions or lymph node metastasis, 6 (9%) were regional with either satellite lesions and/or lymph node involvement and 1 (3%) case was identified with distant metastasis. One case was identified between age 0-4 years, 4 cases between 5-9 years, 10 cases between 10-14 years and 49 cases were between 15-19 years at diagnosis.

**Conclusions:** Incidence rates for melanoma are higher for non-Hispanic white than Hispanic and American Indian children in NM. Distant metastasis is uncommon in pediatric melanoma. Melanoma is a rare disease in the pediatric population, but practitioners must be aware of its occurrence for prompt diagnosis and treatment.

### 20. PRELIMINARY RESULTS OF FENESTRATED AORTIC GRAFTS

Liao TH, Mansour MA, Cuff RF, Kosovec M, Chambers CM, Slaikeu JD, Wong PY  
Grand Rapids Medical Education Partners / Michigan State University / Michigan State University

**Objective:** Patients with juxtarenal aortic aneurysms (JAA) who are too frail to have open repair may be considered for a fenestrated endovascular repair (fenEVAR).

**Methods:** Our aim is to analyze the clinical outcome of our initial experience with a custom made fenestrated endograft. The records of all patients receiving a fenEVAR for JAA were reviewed. Since FDA approval in mid 2012, we began offering this procedure to our patients.

**Results:** Since August 2012, we enrolled 7 patients (4 women and 3 men), average age 75 (range 64 to 85) for elective fenEVAR. Preoperative CT angiograms were reconstructed to design a custom made graft for each patient; there were 5 superior mesenteric scallops, 5 grafts had 2 renal fenestrations and 2 a single renal fenestration. Volume of contrast used ranged between 42 and 122 ml. Fluoroscopy time ranged between 17 and 85 minutes. There were no intraoperative complications and no acute renal failure requiring dialysis. One patient developed a renal hematoma requiring 4 units of blood transfusion postoperatively. All patients survived 30 days. There were 2 deaths at 6 weeks, one from acute intestinal ischemia leading to multiple organ failure and one from respiratory failure.

**Conclusions:** This preliminary report confirms that it is feasible to offer fenEVAR to patients who physiologically cannot tolerate an open repair. However, these procedures are technically challenging. Early outcomes are less favorable than other endovascular procedures.

## 21. INCREMENTAL COST OF COMPLICATIONS IN COLECTOMY: A POTENTIAL GUIDE FOR QUALITY IMPROVEMENT

Asgeirsson T, Jebri N, Feo L, Luchtefeld M, Senagore AJ  
Spectrum Health

**Objective:** Interest in bundled payments has created a need for understanding the value impact of process of care measures and the overall outcome of colectomy. We attempt to define a cost taxonomy for complications after segmental colectomy.

**Methods:** We reviewed segmental colectomies over 5 years. Data included: Type of admit; procedure; unplanned return to OR (UROR); complications. Patients were grouped by number of complications; 0; 1; 2, and  $\geq 3$ . Cost profile was developed for the most prevalent complications. Mean, t-test and chi-square was used

**Results:** 1422 colectomies were analyzed, (open  $n=768$  and laparoscopic  $n=654$ ). Lowest cost for a segmental colectomy was laparoscopic technique with 0 complications at  $\$7,738 \pm 173$ . Laparoscopy had a reduced incidence of complications. ( $0.26 \pm 0.03$  vs  $1.15 \pm 0.08$ ;  $p < 0.001$ ). Open emergent colectomy was associated with the highest warranty cost (\$2688). Warranty for open colectomy by complication groups was 0-(\$1036), 1-(\$501), 2-(\$520) and  $\geq 3$ -( \$1971) This was higher compared to laparoscopic resection with 0-(\$0) and 2- (\$66),  $p < 0.001$ ,  $p = 0.02$ . Laparoscopic warranty for colectomy with  $\geq 3$  complications was (\$248). Readmission after open colectomy was associated with a cost warranty of (\$1518) and was statistically higher than readmits after laparoscopic surgery (\$303);  $p < 0.01$ . UROR for both techniques was (\$448).

**Conclusions:** The lowest cost for segmental colectomy was an uncomplicated laparoscopic procedure. Open colectomy had a significant negative impact on cost of care. These types of analyses are essential for institutions to understand the cost exposure of patients managed and can be used as a guide for contracts negotiated for procedure specific episodes of care.



### 22. TRAUMA RECIDIVISTS: SURPRISINGLY BETTER OUTCOMES THAN NON-RECIDIVISTS

Como JJ, Dixon SD, Banerjee A, Claridge JA  
MetroHealth Medical Center

**Objective:** A large percentage of trauma patients are recidivists. The purpose of this study was to determine if there was a difference in outcomes between recidivists (RCID) and non-recidivists (NRCID).

**Methods:** All trauma admissions from May 2009-May 2010 were included. A recidivist was defined as a patient with a history of hospital evaluation for injury within the prior 5 years. Patients with good functional status had a Glasgow Outcome Score (GOS) of 4-5, while those with poor functional status had a GOS of 1-3. Outcomes of RCID and NRCID were compared.

**Results:** Of the 2,127 patients admitted, 466 (22%) were recidivists. RCID and NRCID had the same mean age. RCID were more likely to be black, male, and victims of penetrating trauma. NRCID were more likely to have Injury Severity Score >25 (12% vs 8.6%;  $p = 0.04$ ) than RCID. Seventeen percent of NRCID were discharged with a poor functional status compared to 12% of RCID ( $p = 0.02$ ). NRCID were more likely to be admitted to a critical care unit (48% vs. 42%,  $p = 0.05$ ) and to require mechanical ventilation (21% vs. 14%,  $p < 0.01$ ). NRCID were less likely than RCID to be discharged home (66% vs. 72%,  $p = 0.01$ ). Subgroup analysis evaluating by injury mechanism, race, and age groups revealed that NRCID consistently had poorer hospital outcomes than RCID. There was no difference in hospital mortality between RCID and NRCID.

**Conclusions:** NRCID were more severely injured and had poorer hospital outcomes than RCID. These relationships held true even after stratification into high-risk subgroups.

### 23. BIOLOGICS IN VENTRAL HERNIA RECONSTRUCTION

Iacco A, Adeyemo A, Riggs T, Janczyk R  
Beaumont Health System

**Objective:** To evaluate outcomes of patients who underwent complex ventral hernia repair with a cross linked porcine dermal heterograft (Permacol) or noncrosslinked cadaveric allograft (Alloderm).

**Methods:** A retrospective review was performed between 2007-2011 for 172 consecutive patients having complex ventral hernia repair with Permacol or AlloDerm. The main outcome was hernia recurrence, and secondary outcomes included early and late complications and mortality.

**Results:** Patients receiving AlloDerm or Permacol did not differ in BMI, number of comorbidities, indication for surgery or clean/contaminated. Recurrence for Permacol vs. AlloDerm was 38% vs. 50%, ( $p=0.20$ ). Median time to recurrence was significantly different (Permacol 10 months, AlloDerm 14 months). There was a marginal difference in early complications of Permacol 48% and AlloDerm 30%,  $p=0.054$ , with difference in late complications of 32% vs. 20%,  $p=0.17$  and mortality 11% vs. 6%,  $p=0.56$ . Significant differences were seen based on surgical technique. Recurrence for Permacol vs. AlloDerm using an underlay technique was 21% vs. 31% and using a bridging technique as 52% vs. 61%. The bridging technique was strongly associated with early and late complications and recurrence. 71% of the bridging cohort had a recurrence while only 28% of the underlay cohort had recurrence by 2 years. Mean follow-up time was 15 months.

**Conclusions:** The results from this study indicate the high complication rate from both Permacol and Alloderm in complex ventral hernia repair. Results also indicate the high recurrence rate for using biologics as a fascial bridge.

### 24. CAN ULTRASOUND COMMON BILE DUCT DIAMETER PREDICT COMMON BILE DUCT STONES IN THE SETTING OF ACUTE CHOLECYSTITIS?

Boys JA, Doorly MG, Zehetner J, Dhanireddy KK, Senagore AJ

Los Angeles County and University of Southern California Hospitals

**Objectives:** Assess the ability of ultrasound (US) common bile duct diameter (CBDD) to predict the concomitant presence of common bile duct stones [(+)CBDS] in acute cholecystitis (AC).

**Methods:** A retrospective review of patients from 2007 - 2011 with codes for Ultrasound, MRCP, ERCP and AC. Data was extracted and protected from medical records in Microsoft Excel (2007). Two-tailed, unequal variance t-Tests were performed using Microsoft Excel (2007).

**Results:** Patients with US+MRCP+ERCP+AC (n=248), with no (-)CBDS+AC (n=200) and (+)CBDS+AC (n=48). 11% of all MRCPs performed were +CBDS. 72% of patients with CBDS on US had a (+)ERCP. 71% of all ERCPs were +CBDS. The smallest and largest US CBDD with (+)CBDS was 3.6 and 19mm. The mean CBDD in (-)CBDS+AC and (+)CBDS+AC was  $5.8 \pm 2.3$  and  $7.08 \pm 3.4$  mm respectively ( $P = 0.0043$ , 95% CI -2.02 - 0.38). Mean CBDD and (-)MRCP+AC vs. (+)MRCP+AC was  $5.91 \pm 2.4$  vs.  $6.9 \pm 3.8$ mm ( $p = 0.09$ ; CI -2.16 - 0.166). Mean US CBDD and (-)ERCP+AC vs. (+)ERCP+AC was  $6.2 \pm 3.4$  vs.  $7.4 \pm 3.6$  ( $p = 0.3$ ; CI -3.5 - 1.2). There was no correlation with US CBD diameter, (+)ERCP or (+)MRCP and age. US CBDD ranges of 3.3 - 5, 5-9.9 and >10mm had 12.5%, 18.9% and 44% of +CBDS respectively.

**Conclusions:** US CBD diameter alone is not a good indicator of common bile duct stones. If the CBD diameter is < 7 and no CBDS on US then operative management is indicated; if US CBD diameter is 7-10 we recommend intraoperative cholangiogram and if >10mm an MRCP may be warranted.

### 25. OBSTRUCTIVE SLEEP APNEA IN GENERAL SURGERY PATIENTS: IS IT MORE COMMON THAN WE THINK ?

Sarker S, Kulkarni GV, Horst A, Eberhardt JM, Kumar S  
Loyola University Medical Center

**Objectives:** To determine the risk of obstructive sleep apnea (OSA) in preoperative surgical patients.

**Methods:** Between 6/2011 and 12/2011, all new patients presenting to an outpatient general surgery clinic were prospectively screened for OSA using the STOP-BANG questionnaire. Patients were classified as high risk with a score of >3 on the STOP-BANG or >2 on the STOP questionnaire. Survey results were analyzed retrospectively. Medical records were reviewed for polysomnography (PSG).

**Results:** Three hundred seventy-three patients were surveyed. Complete questionnaires were available on 370 (99.2%) patients. Two hundred thirty-eight (64.3%) patients were classified as high risk for OSA on the STOP-BANG questionnaire, while 189 (51.1%) were high risk on the STOP questionnaire only. One hundred eighty-one (48.9%) patients were identified as high risk on both questionnaires. PSG results were available on 40 patients and revealed severe OSA in 17 (42.5%), moderate OSA in 6 (15%), mild OSA in 10 (25%) and no OSA in 7 (17.5%) patients. The positive predictive (PPV) and negative predictive value (NPV) of the STOP questionnaire were 87.5% and 28.5%, respectively and 86.2% PPV for the STOP-BANG questionnaire.

**Conclusions:** A significant number of patients presenting to a general surgery clinic are at high risk for OSA. However, very few have undergone appropriate evaluation. Screening for OSA should be considered in patients who are candidates for elective general surgical operations. STOP BANG questionnaire may be used for this purpose.

### 26. MASSIVE PANNICULECTOMY RESULTS IN IMPROVED FUNCTIONAL OUTCOME

Debord JR, Evans CR, Marshall JS, Rossi TR, Howe HL, Owolabi M  
University of Illinois College of Medicine

**Objective:** Panniculus morbidus is the development of a large abdominal apron in the morbidly obese population. Panniculus morbidus predisposes to health and hygiene concerns and often is functionally debilitating. Our study was designed to assess the functional improvement in patients with panniculus morbidus undergoing massive panniculectomy.

**Methods:** The authors conducted a retrospective chart review of panniculectomies performed from 1994 to 2012. Patients with panniculectomy specimens weighing greater than 20 lbs were selected. Data on demographics, operative details, complications, and pre- and post-operative functional capacity were collected. Functional capacity (1-4) was assigned using the Steinbrocker Functional Classification (1- full functional capacity; 2- minor disability; 3- major disability; 4- incapacitated).

**Results:** The pre-operative mean weight of our patient population was 372.4 lbs (range 222-531 lbs) with a mean BMI of 58.3 (range 39.2-72). Specimen weight ranged from 20-62.3 lbs (mean 33.6 lbs). The overall complication rate was 75% (21 of 28) with major complications accounting for 46.4% (13 of 28) and minor complications accounting for 28.6% (8 of 28). A statistically significant improvement in functional capacity following massive panniculectomy was identified Pre-op mean functional score.

**Conclusions:** Panniculus morbidus is a debilitating condition restricting patient function and predisposing to continued weight gain. Massive panniculectomy is a technically challenging procedure with a high complication rate but is often the only treatment option available for this patient population. Our data suggest that massive panniculectomy is a viable option for patients functionally incapacitated by panniculus morbidus.

### 27. PERMANENT MESH RESULTS IN LONG-TERM SYMPTOM IMPROVEMENT AND PATIENT SATISFACTION WITHOUT INCREASING ADVERSE OUTCOMES IN HIATAL HERNIA REPAIR

Petersen LP, McChesney SL, Daly SC, Millikan KW, Myers JA, Luu MB  
Rush University Medical Center

**Objective:** The purpose of this study was to evaluate symptom relief, patient satisfaction, and safety of permanent mesh following Nissen fundoplication and hiatal hernia repair, as there remains concern over severe complications secondary to use of permanent mesh near the esophagus.

**Methods:** Patients who underwent Nissen fundoplication and hiatal hernia repair with permanent mesh (Crurasoft) between 2005 and 2011 were identified. A retrospective chart review was conducted. Long-term follow-up data was obtained via telephone interviews using a modified 5-point Likert scale.

**Results:** Forty-one patients were identified meeting study inclusion criteria. Twenty-six patients (63.4%) had complete follow-up data. Mean follow-up was 65 months (14-96 months). Eighteen (69.2%) patients underwent laparoscopic repair. Symptomatic improvement occurred in 23 (88.5%), and 15 (57.6%) of patients reported complete resolution of symptoms. Of the 11 patients without complete response, the most common symptoms were persistent heartburn and dysphagia. Twenty-three patients (88.5%) reported overall satisfaction with the procedure as either excellent or good, and 23 of 26 patients (88.5%) would undergo surgery again. Nine patients (34.6%) were on acid suppression therapy, and three (11.5%) reported hernia recurrence. One patient underwent reoperation at an outside facility, and two patients underwent surgery at our institution. One of these patients had a slipped wrap, and the other patient had migration of the mesh with a slipped wrap. There were no mesh erosions. 30-day mortality was zero.

**Conclusions:** Despite concerns, the use of permanent (Crurasoft) mesh resulted in symptom improvement as well as patient satisfaction, and no mesh erosions were seen.

# Poster List

---

## **1. MULTIMODAL THERAPY DECREASES PNEUMONIA AS A COMPLICATION OF RIB FRACTURES**

Lamb AD, Kemmer HK, Brodsky R, Franzen K  
Oakwood Southshore Medical Center

## **2. PERCUTANEOUS DRAINAGE OF RECURRENT DIVERTICULAR ABSCESS SHOULD BE LIMITED TO TWO ATTEMPTS**

Mittal VK, Subhas G, Bhullar JS, Rana G, Essad K, Mohey L  
Providence Hospital and Medical Centers

## **3. FUTILE CARE AND FAILURE TO RESCUE ARE RESPONSIBLE FOR HIGHER SURGICAL MORTALITY**

Korepta LM, Mansour MA, Watson JJ, Liao TR, Cuff RF, Chambers CM, Slaikeu JD  
Grand Rapids Medical Education Partners -  
Michigan State University

## **4. DISTRIBUTION OF GASTROINTESTINAL NEUROENDOCRINE TUMORS: IS IT TIME TO UPDATE THE LITERATURE?**

Gross KN, Richards J, Lamzabi I, Mora-Pinzon MC, Francescatti AB, Brand MI, Jakate S, Slogoff M, Eberhardt J, Hayden DM, Saclarides TJ  
Loyola University Medical Center

## **5. OLDER TRAUMA PATIENTS ARE ASSOCIATED WITH A GREATER RISK OF INPATIENT HARMS**

Bauman Z, Gassner M, Horst M, Blyden D, Rubinfeld I  
Henry Ford Hospital

## **6. TRANSITION FROM FULLY-OPEN TO FULLY-ROBOTIC SURGICAL ONCOLOGY CASES WITHOUT LAPAROSCOPIC EXPERIENCE - IS IT POSSIBLE?**

Saha S, Abadeer B, Johnston GJ, Korant A, Gomez-Seoane A, Tyagi N, Dhar V, Kaushal S, Ganatra B, Wiese D  
McLaren Flint

## **7. A SYSTEM ANALYSIS OF EARLY CHOLECYSTECTOMY FOR ACUTE CHOLECYSTITIS**

Roelle MP, Tuttle RM, Thobe KM, Myers RA, Parikh PJ, Parikh PP, McCarthy MC  
Wright State University

# Poster Abstracts

---

Poster 1

## MULTIMODAL THERAPY DECREASES PNEUMONIA AS A COMPLICATION OF RIB FRACTURES

Lamb AD, Kemmer HK, Brodsky R, Franzen K  
Oakwood Southshore Medical Center

**Objective:** Pneumonia is a known complication of rib fractures. It has devastating effects on healthcare costs, length of stay, morbidity and mortality; especially in elderly patients. We sought to examine how aggressive pain control and pulmonary support decreases the incidence of pneumonia as a complication of rib fractures.

**Methods:** This cohort study extracted data from the trauma registry at a level-two trauma center from October 2011-2012. Based upon the TQIP definition of pneumonia, we assessed 68 concurrent patients who suffered two or more rib fractures and required hospital admission for more than one day. In four month intervals, outcomes were assessed and treatments modified. Treatments began with Acapella Vibratory PEP Therapy alone. Acapella therapy was initially supplemented with On-Q pain pump with bupivacaine and finally bipap therapy was added from 2100-0800.

**Results:** The Acapella device was employed in patients who met inclusion criteria. Institutional pneumonia rates, as a complication of rib fractures, decreased over a four-month period, from a baseline of 5.2% to 4.55%. The addition of dual-lumen OnQ pain catheters decreased the pneumonia rate to 3.23%. Bipap was then added from 2100-0800. Over the next four-month period, our pneumonia rates decreased to 0%. Additionally, the rate has remained at 0% through January, 2013; which includes an additional 15patients.

**Conclusions:** Using a proactive multimodal approach on patients with traumatic rib fractures, pneumonia rates were drastically reduced. Subsequent decrease in morbidity, mortality and overall length of stay was accomplished. This is a novel approach to mitigate a known devastating complication.



### Poster 2

#### **PERCUTANEOUS DRAINAGE OF RECURRENT DIVERTICULAR ABSCESS SHOULD BE LIMITED TO TWO ATTEMPTS**

Mittal VK, Subhas G, Bhullar JS, Rana G, Essad K, Mohey L

Providence Hospital and Medical Centers

**Objective:** To determine the number of percutaneous drainages that should be performed in recurrent diverticular abscesses before attempting surgery.

**Methods:** All patients (n=117) who presented with CT scan-proven diverticular abscess from July 2008 to June 2011 were studied. Aspiration of pus with needle without placement of drainage catheter, re-adjustment of drain, flushing of drain and upgrading the drain size were not considered as separate drainage procedures.

**Results:** Forty-two patients (17 men & 25 women) with diverticular abscess underwent percutaneous drainage:  $\geq 3$  drainages (n=6), 2 drainages (n=9) or 1 drainage (n=27). The average time between drains for patients with  $>1$  drain was 72 days (range 20-180). The size of abscess cavity was significantly higher for the patients who had  $\geq 3$  drainages (mean 8 cm,  $P<0.001$ ). A Hartmann's procedure was performed in the majority of patients in the  $\geq 3$  drainage group (83%), but the frequency dropped as the number of drainages performed dropped: {2 drainage-group (44%), 1 drainage-group (15%) and no-drainage group (19%)}. There was a significantly higher pre-operative hospital stay for drainage and antibiotic usage in the patients from the  $\geq 3$  drainage group ( $P<0.001$ ).

**Conclusions:** Patients with a recurrent diverticular abscess are very likely to undergo a Hartmann's procedure after 2 attempted drainages. Performing additional percutaneous drainages in an attempt to avoid ostomy puts patients at an increased risk of sepsis and peritonitis, with prolonged antibiotic usage and increased healthcare costs. We recommend limiting percutaneous drainage procedures to 2 attempts to cool down a recurrent diverticular abscess prior to definitive surgery.

Poster 3

### **FUTILE CARE AND FAILURE TO RESCUE ARE RESPONSIBLE FOR HIGHER SURGICAL MORTALITY**

Korepta LM, Mansour MA, Watson JJ, Liao TR, Cuff RF, Chambers CM, Slaikeu JD  
Grand Rapids Medical Education Partners / Michigan State University

**Objective:** Participation in a surgical quality improvement program generates risk-adjusted outcomes and opportunities for improvement.

**Purpose:** To analyze in detail all deaths occurring in one year.

**Methods:** A retrospective chart review of all patients who died after a surgical procedure, as reported in the National Surgical Quality Improvement Program. The nurse reviewer and surgeon champion collected the cases and reviewed outcomes with the three section leaders, colorectal, general and vascular surgery. A consensus determination of the causes of death in one of these categories: unavoidable, futile care, failure to rescue.

**Results:** In a 12-month period, the mortality rate was 0.71% for general surgery (9 of 1268), 3.8% for colorectal (7 of 180) and 4.5% for vascular (14 of 310). This resulted in decreasing the hospital ranking to the 9th decile. Detailed analysis revealed that the median age at death was 79.5 years. There were 8 women (26%). Nearly half the deaths occurred due to futile care or failure to rescue after a life-threatening complication in the postoperative period. In several cases, the families of these patients elected to withdraw support in the first week postoperatively.

**Conclusions:** Surgeons are frequently pressured to operate on moribund patients whose chances of survival are dismal. Analysis of our hospital mortality rate revealed that nearly half the deaths were attributed to futile care or failure to rescue.

### Poster 4

#### **DISTRIBUTION OF GASTROINTESTINAL NEUROENDOCRINE TUMORS: IS IT TIME TO UPDATE THE LITERATURE?**

Gross KN, Richards J, Lamzabi I, Mora-Pinzon MC, Francescatti AB, Brand MI, Jakate S, Slogoff M, Eberhardt J, Hayden DM, Saclarides TJ  
Rush University Medical Center

**Objective:** Neuroendocrine tumors (NET) comprise a heterogeneous group of tumors. We report our clinical experience with this tumor during the past decade.

**Methods:** Retrospective chart review from 2000-2012 of patients with gastrointestinal NET distal to the ligament of Treitz.

**Results:** Eighty-six cases were identified. The average age was 57.72 (range 16–84), 64.0% were female. Small intestine and rectum were the most common sites (36.0% each), followed by appendix (14%), colon (5.8%) and anus (5.8%). Fifty-six percent of patients were symptomatic with abdominal pain (28.7%), constipation (21.3%) and diarrhea (12.5%). 17.4% presented with metastases. The most common treatment was surgery (69.2%), followed by combined therapy (25%). Six percent of the tumors were in-situ, 20.8% were T1, 18.9% were T2, 39.6% were T3 and 5.1% were T4; 40.7% had nodal involvement. 80.5% were grade 1 NET, 5.2% were grade 2 NET and 14.3% were grade 3 neuroendocrine carcinomas (NEC); of these, 22.2% were small cells, 22.2% were intermediate size cells and 55.6% were large cells. Neuroendocrine markers (chromogranin and/or synaptophysin) confirmed the diagnosis in 66.3%. Univariate analysis showed that appendiceal tumors were most common in young patients and colonic tumors were most common in older patients ( $p=0.001$ ). Colonic tumors were larger than tumors at other locations ( $p=0.001$ ). Average follow up was 20.31 months, 4 patients died of disease.

**Conclusions:** The most common location were rectum and small intestine, which contradicts literature. Tumor biology and stage of presentation is variable. Further investigation to assist with risk stratification and therapeutic management is warranted.

Poster 5

### **OLDER TRAUMA PATIENTS ARE ASSOCIATED WITH A GREATER RISK OF INPATIENT HARMS**

Bauman Z, Gassner M, Horst M, Blyden D, Rubinfeld I  
Henry Ford Hospital

**Objective:** The purpose of this study was to explore differences in inpatient harm comparing older trauma patients to all other trauma patients.

**Methods:** Retrospective review of all trauma patients admitted to a single Level 1, urban tertiary hospital from 2009-2011. Hospital admission data including harm was linked to corresponding trauma registry data. We defined older trauma patients as over 65. Risk factors for harm occurrence were explored using univariate methods and multivariate logistic regression.

**Results:** A total of 5,345 patients were analyzed. Patient population consisted of 41% females, 50.9% African Americans and 66.7% of patients >65. Patients >65 were more likely admitted for traumatic falls (88.2% vs 36%,  $p<0.001$ ) and required less operative intervention (26.7% vs 47.1%,  $p<0.001$ ). Elderly patients experienced more harm from medications (6.1% vs 4.5%,  $p<0.008$ ), renal failure (2.6% vs 1.8%,  $p<0.001$ ), infections (4.2% vs 2.5%,  $p<0.001$ ), pressure ulcerations (1.4% vs 0.8%,  $p<0.021$ ), inpatient falls (0.5% vs 0.1%,  $p<0.006$ ) and re-admissions within 30 days for the same DRG ( $p<0.004$ , OR=0.568). The ASA and Elixhauser Comorbidity Index were most influential (OR=1.78 and 1.07 respectively,  $p<0.001$ ) while injury severity score was significant but less influential (OR=1.043,  $p<0.001$ ).

**Conclusions:** Interestingly, drivers of harm were mostly related to issues of the elderly rather than injury related parameters. Elderly trauma patients typically experience more inpatient harm, likely due to increased frailty and comorbidities. Furthermore, 30-day re-admission for elderly patients is a constant and costly challenge. Quality initiatives must focus on both surgical technical outcomes and inpatient harm prevention to improve patient outcomes and reduce healthcare costs.

### Poster 6

#### **TRANSITION FROM FULLY-OPEN TO FULLY-ROBOTIC SURGICAL ONCOLOGY CASES WITHOUT LAPAROSCOPIC EXPERIENCE - IS IT POSSIBLE?**

Saha S, Abadeer B, Johnston GJ, Korant A, Gomez-Seoane A, Tyagi N, Dhar V, Kaushal S, Ganatra B, Wiese D  
McLaren Flint

**Objective:** Laparoscopic training allowed surgeons to transition to da Vinci robotic surgery with relative ease. However, the development of robotic skills is not largely described in surgeons with only open surgical experience. Hence, a prospective study was undertaken by a single oncologic surgeon without laparoscopic experience to assess the feasibility and safety of transition from fully-open to fully-robotic oncologic surgery.

**Methods:** After initial training in 10 proctored oncologic robotic cases, data was collected for: operation type, age, body mass index (BMI), blood loss (EBL), operative time, length of stay (LOS), complications, conversion to open and pathology. Data was compared to similar open oncologic operations during the same time period. Complications included: cardiac events, infections, repeat operation, stroke, thromboembolic event and death.

**Results:** A total of 146 robotic cases were compared to 164 open cases. Mean EBL was 153 ml in robotic compared to 277 ml in open cases. The mean LOS was 6.3 vs. 8.4 days in the robotic vs. open groups. Robotic cases averaged 100 minutes longer duration; 284.5 min vs. 185.7 min. BMI was also greater in the robotic group, 30.5 vs. 28.9. Rate of conversion from robotic to open was 8.3% (12/146). The robotic group had 19 (13%) complications vs. 29 (17.6%) in the open group.

**Conclusions:** Transition from open to fully-robotic surgical oncology cases is possible and safe without laparoscopic experience. Our robotic cases had less EBL, complications and LOS. Conversion rate from fully-robotic to open remained small in the robotic group.

## Poster Abstracts continued

---

Poster 7

### **A SYSTEM ANALYSIS OF EARLY CHOLECYSTECTOMY FOR ACUTE CHOLECYSTITIS**

Roelle MP, Tuttle RM, Thobe KM, Myers RA, Parikh PJ, Parikh PP, McCarthy MC  
Wright State University

**Objective:** Debate continues on the timing of surgery for acute cholecystitis. Prompt cholecystectomy is most commonly performed. However, limited system resources may create delays. To map this process, we evaluated the timing and outcomes of patients undergoing cholecystectomy on an acute care surgery service.

**Methods:** Seventy-five patients undergoing cholecystectomy for acute cholecystitis were enrolled and data collected and analyzed for patient flow, practice patterns, and performance improvement.

**Results:** The mean hospital length of stay (LOS) was 104.3 hours (n=75). Patients undergoing cholecystectomy within 10 hours of diagnosis (EARLY) had a significantly shorter LOS compared to patients undergoing surgical intervention after 10 hours (LATE) (31.9 versus 110.1 hours,  $p < 0.05$ ). Fewer intra- and postoperative complications were observed in the EARLY group compared to the LATE group. Significant surgeon variation in time to operating room (OR) (mean 74 hours to 155 hours) was identified. The LOS was higher for patients with other comorbid conditions (ASA score 3-4). Mean LOS for patients converted to "open" was also significantly higher (191.4 hours) than others (78.8 hours) ( $p < 0.05$ ). LOS and complications were independent of operating room (OR) duration, patient age and BMI, enzyme levels, payer source, and preoperative antibiotics.

**Conclusions:** This study provided a map of the critical processes for preoperative interventions, timing of operation, and postoperative care. The gate function was OR availability, and delay to OR increased complications and LOS. This data will be shared with administration and better plan OR schedules for optimal use of hospital resources and improved patient outcomes.

# Spectacular Problems In Surgery

---

## 1. EMERGENT INTRAOPERATIVE PULMONARY EMBOLECTOMY (OFF PUMP) DURING A LOWER LIMB AMPUTATION.

Osborne ZJ, Wheatley B, Dharamsy S, Rossi P, Aucar JA  
Carle Foundation Hospital

A 55 year-old obese diabetic female with chronic renal failure and peripheral arterial disease presented with an acutely ischemic right foot. Thrombolytics were started. Angiography demonstrated no revascularization options. During a scheduled right above-the-knee amputation, she developed a sudden drop in end-tidal carbon dioxide. She became profoundly hypoxic and hypotensive despite multiple maneuvers, including bilateral chest tubes. A transesophageal echocardiogram showed a dilated right atrium and poor ventricular contractility, but no thrombus. A massive pulmonary embolism was diagnosed clinically. Off pump pulmonary embolectomy was performed with immediate improvement. She did well post-operatively, despite delayed sternal closure and heparin induced thrombocytopenia.

# Spectacular Problems in Surgery continued

---

## 2. SURVIVING 1 IN 10 ODDS AFTER THORACOABDOMINAL PENETRATING TRAUMA: LAWNMOWERS, HELICOPTERS, AND MAYO CLINIC. A CASE REPORT.

Zhukov Y, Jenkins D  
Mayo Clinic

Results: 52-year-old man sustained a penetrating right flank injury while mowing his lawn. He was transferred by EMS to a local hospital in hypovolemic shock, and was found to have a right hemothorax and a metallic projectile within the right hemithorax. A tube thoracostomy and pericardiocentesis were performed, and 4 units of PRBC administered with only transient improvement of hemodynamics. He was airlifted to Mayo Clinic, and was emergently taken to the Operating Room. A median sternotomy and a midline laparotomy were performed, identifying a Right Atrial laceration and a penetrating injury of the Suprahepatic Infradiaphragmatic Inferior Vena Cava; both were repaired. The patient returned to the OR within 12 hours due to ongoing hemorrhage in the right chest which was surgically inaccessible; it was temporized with a hemostatic agent and the victim was transferred to an OR with fluoroscopy capability. A transection of the right 12th intercostal artery was identified by the Interventional Radiology Team and was controlled with coil embolization. Two days later the patient returned to OR for closure of his incisions. He was hospitalized for 14 days, and received more than 80 units of blood products.

Conclusions: At annual follow-up the patient recovered enough to resume farming. His survival and eventual recovery were undoubtedly attributable to his timely transfer to a Tertiary Care Center, the unique capabilities for advanced resuscitation aboard the Mayo One Helicopter and coordinated efforts by the Mayo Clinic multidisciplinary care team.



## **Spectacular Problems in Surgery** continued

---

### **3. MASSIVE LOWER GASTROINTESTINAL BLEEDING FROM AN UNUSUAL SOURCE**

Tozzi F, Malik T, Ekeh AP

Wright State University Department of Surgery

47 yr old female s/p kidney and pancreas transplants presented with massive lower GI bleeding. Stabilized with transfusions and underwent negative visceral angiography. Bleeding resumed few hours later and nuclear scintigraphy determined the sigmoid colon to be the source. A repeat angiogram was negative. Upon returning to the ICU, bleeding restarted and she developed hemodynamic instability. An emergent subtotal colectomy was performed. Bleeding continued from the ileostomy post-operatively. Re-examination of her angiograms determined the presence of bleeding from the right external iliac vessel into the small intestine –related to the pancreatic transplant. A covered vascular stent ultimately successfully arrested the bleeding

## 4. APPENDICITIS N'EST PAS?

Shroder D

St. John Hospital and Medical Center

A 49 year old female with a history of 5 prior laparoscopies for endometriosis is visiting France in October 2012 when she develops RLQ abdominal pain so goes to the ER. She is diagnosed with acute appendicitis and has a laparoscopic appendectomy performed. She returns to the USA 10 days later with some cellulitis of her 12 mm LLQ port site and is seen by a surgeon who treats her with topical antibiotic ointment. She feels well. She does not have a copy of the operative report or the pathology report. Three months later she again experiences 3 days of severe RLQ abdominal pain so presents to an ER here in the USA. A CAT scan is done and is read as acute appendicitis. The surgeon at that hospital treats her non-operatively with antibiotics and plans an interval appendectomy. She comes to see the surgeon she initially saw when she had returned from France for a second opinion. Her CAT scan is reviewed and she is brought to the OR 6 weeks later for laparoscopy. The operative strategy and findings will be discussed.

# Spectacular Problems in Surgery **continued**

---

## 5. BOWEL OBSTRUCTION SECONDARY TO AN UNUSUAL INTERNAL HERNIA

Blatnik JA, Wilhelm SM

University Hospitals Case Medical Center

A 45 year-old female presented with complaints of abdominal pain and emesis. The patient had diffuse abdominal pain, with guarding in the LLQ. CT scan revealed a small bowel obstruction, with a transition point in the LLQ. Upon laparoscopic evaluation, an internal hernia was identified, with over 2 feet of small bowel passing under the left fallopian tube, through a congenital “fenestra” type defect of the broad ligament. Due to a tight defect, we were unable to simply reduce the herniated bowel. A left salpingectomy was needed to release the strangulated bowel, which was viable, and no resection was required.

## 6. A RARE COMPLICATION AFTER ESOPHAGEAL DUPLICATION CYST EXCISION IN A PEDIATRIC PATIENT

Bobanga ID, Robke JM, DeRoss AL  
University Hospitals Case Medical Center

A four-year old girl presented with abdominal pain, constipation and chest pain. Computed tomography of the abdomen revealed a 2cm cystic structure in the right posterior mediastinum. The cyst was dissected thoroscopically from the muscle layer of the esophagus while no compromise of the mucosa was noted endoscopically. Pathology revealed esophageal duplication cyst. Two months postoperatively, the patient presented with chest pain while eating solids. Upper GI revealed an epiphrenic esophageal diverticulum at the site of cyst excision. This was resected transabdominally, along with esophageal myotomy and partial fundoplication. The diverticulum partially recurred and ultimately required resection via thoracotomy.



# LECTURES

# Scott Warner Woods, 1927 - 2003

---



When attending a Midwest Surgical Association meeting, it takes little effort to almost believe that the haunting notes of a bagpipe still echo in the air. For many years, that sound accompanied the sight of a kilt-clad Scott Warner Woods as he stood wearing his trademark hand-tied tartan bow tie and played to announce the beginning of another annual meeting.

Scott W. Woods, except for his brief stint in Korea with the U.S. Army at the end of World War II, was a life-long Michiganiaan. He was born in Detroit and in 1950 he received his undergraduate degree from the University of Michigan. He then attended Wayne State University College of Medicine and graduated in 1954. After an internship at Wayne County General Hospital, he completed a surgical residency at Wayne State University in 1960. That same year,

he achieved his second greatest accomplishment when he established his first solo practice in Ypsilanti, MI. By 1964, he managed to attain his life's greatest accomplishment when he married his beloved Bette.

Second only to his family, Scott loved the Midwest Surgical Association best and served it tirelessly. He was Treasurer of the Association for a decade before ascending to its presidency in 1986. He championed the controversial decision to bring the Annual Meeting to Mackinac Island. Widely questioned at the time due to the island's remoteness and perceived inaccessibility, this location has easily become the best attended and most well-loved site for the annual conference. In 1987, after a long and successful surgical career as a private practitioner and as Clinical Associate Professor of Surgery at Wayne State University, Scott retired from active surgical practice in 1987 due to complications from arthritis. Scott and Bette remained together in Ypsilanti for the rest of his life.

Scott viewed retirement as a chance to cut back to only 50 or 60 hours of work each week. He remained an important part of his community in Ypsilanti, where he served on the city council, the board of the Ypsilanti Savings Bank, the Chamber of Commerce (including a term as president), with the Lions Club and as a trustee of Cleary College. He reviewed disability claims for the state and worked for the Michigan Peer Review Organization. Scott received many honors and awards from the numerous professional organizations that were proud to call him a member. These organizations included the American College of Surgeons, the Academy of Surgery of Detroit and the Detroit Surgical Association. He was awarded an honorary doctorate from Cleary College for his years of service. His highest accolade occurred in 1995 when both Scott and Bette were selected to receive the Distinguished Philanthropist Award from the American College of Surgeons.

Surgeon, teacher, community leader, philanthropist, husband, father and friend—Scott's death left an empty place in the hearts of all who knew him. He gave selflessly during life and will continue to give in death. Gone is the man, but not the memory.

# 2013 Scott Warner Woods Memorial Lecture

---



Introduction: Stephen F. Sener, MD

*Featuring*

**Christy A. Russell, MD**

University of Southern California

***Personalized Medicine for  
Breast Cancer: It's a New Day!***

Christy A. Russell, MD is associate professor of medicine at the University of Southern California (USC) in Los Angeles and co-director of the USC/Norris Breast Center. Dr Russell received her medical degree from the Medical College of Pennsylvania in Philadelphia. She completed a residency in internal medicine at the Good Samaritan Medical Center and Phoenix Veteran's Hospital in Phoenix, Arizona and a fellowship in hematology/oncology at the Los Angeles County/University of Southern California (LAC/USC) Medical Center in Los Angeles. Dr. Russell joined the USC Department of Medicine faculty in 1986. She served as the medical oncology fellowship training program director from 1991 through 2008 and the chief of staff at USC/Norris Cancer center from 1994-1996. She currently serves as the director of utilization review at USC/Norris Cancer Center.

Dr Russell serves on the American Cancer Society Cancer Action Network National Board of Directors, and currently is the Vice-Chairperson of the Board. She was a member of the American Cancer Society national board of directors from 2006-2010 and continues to chair the national Reach to Recovery advisory group. She served as a director on the board of the California Division of the American Cancer Society from 1998-2011 and was President of the board from 2002-2003. She currently is an Honorary Life Member of the California Division of the American Cancer Society.

Dr Russell is a member of the American College of Physicians, the American Society of Breast Surgeons, and the American Society of Clinical Oncology. As part of her research efforts, Dr Russell is a member of the Breast Committee of the Southwest Oncology Group and the Breast Cancer International Research Group. She is the editor of ACS Cancer Information Database on Breast Cancer.

# William Hunter Harridge, 1919 - 1971

---



Bill Harridge was a man of uncommon energy, integrity, and honesty. His personal enthusiasm, as well as his organizational abilities, made him an outstanding leader of men and organizations. This was evident early in his life as he served with distinction as a company commander of an Army tank unit. In 1945, he suffered a severe open-chest wound in France causing his discharge from the Army with the rank of major.

In 1963, after much discussion and thought, a decision was made to disband the Midwest Surgical Society. Fortunately for our present Society, Bill was persuaded to assume the Presidency for the coming year. Under his leadership, the Society was resurrected, its geographical base was expanded, and it has flourished ever since.

With the exception of his father, Will Harridge, Sr., who was the President of the American Baseball

League, Bill's relationship with Dr. Warren Cole was the most important in his life. Dr. Cole writes: "Bill had good judgment, sincerity, determination, willingness to discipline himself... he had complete honesty and integrity...compassion, a characteristic so necessary if one is to become a fine physician."

Bill graduated from the University of Illinois College of Medicine in 1950 and served his internship and residency under Dr. Cole from 1950 to 1956. While he entered private practice in Evanston, Illinois, he maintained an active clinical affiliation with the University and was promoted to the rank of Clinical Professor. In May of 1970, he received the Distinguished Service Award in recognition of his contribution to the Department of Surgery.

Bill was a strong advocate of doctors determining their own professional organizations. He was a Diplomat of the American Board of Surgery and belonged to the Warren H. Cole Society (President 1968-69), Midwest Surgical Association (President 1964-65), North Suburban Branch of the Chicago Medical Society (President 1969-70), Chicago Surgical Society (Recorder 1967-70), The Western Surgical Association, The Illinois Surgical Society, The Society for Surgery of the Alimentary Tract, North Shore Chapter American Cancer Society (President 1966-68), The Institute of Medicine of Chicago and the American College of Surgeons. His many contributions to the surgical literature were primarily related to peripheral vascular and biliary tract disease.

Beloved by his patients and respected for his abilities by his surgical colleagues, Bill Harridge is most remembered for his rigid adherence to the principle of fairness, honesty, and forthrightness in all situations.



# 2013 William Hunter Harridge Memorial Lecture

---



Introduction: Stephen F. Sener, MD

*Featuring*

**Fred A. Weaver, MD, MMM**

University of Southern California Keck Hospital

***Carotid Endarterectomy vs. Stenting  
for Stroke Prevention: What We Have  
and Will Learn from CREST***

Dr. Fred Arthur Weaver holds the title of Professor of Surgery at the Keck School of Medicine of the University of Southern California (USC). Dr. Weaver's education includes a Bachelor of Science and Doctor of Medicine degrees from the University of Southern California. He also has a Masters in Medical Management which he received from USC in 2005. Dr. Weaver received his general and vascular surgery training at Vanderbilt University Medical Center in Nashville, Tennessee. He has been a USC faculty member since 1986 and served as Program Director for General Surgery from 1996-2000 and has served as Program Director for Vascular Surgery from 2000-2012. He is the Chief of Vascular Surgery and Endovascular Therapy and Director of the Max R. Gaspar Symposium, an annual meeting which highlights advances in the treatment of vascular disease. Dr. Weaver is Distinguished Fellow of the Society for Vascular Surgery, a Fellow of the American College of Surgeons and current President of the Society for Clinical Vascular Surgery and the Pacific Coast Surgical Association. Dr. His scholarly contributions include 169 articles, 35 textbook chapters and oral presentations at numerous local, regional and national surgical meetings. His major research interest concerns the diagnosis and management of diseases which affect the aorta and its major branches with an emphasis on aortic and renal artery disease. These research efforts are complimented by an active and diverse clinical practice at the Keck Hospital of USC where he performs both endovascular and open reconstructive aortic procedures. Dr. Weaver is married to the former, Rebecca Barber and has three sons, Mark, David and Geoff. He lives in La Canada, California.

# William Hunter Harridge Lecturers

---

Fred A. Weaver, MD, MMM	2013
Daniel B. Michael, MD, PhD	2012
Leigh Neumayer, MD	2011
Kirby I. Bland, MD	2010
Jay L. Grosfeld, MD	2009
Douglas J. Mathisen, MD	2008
Terry Hicks, MD	2007
George I. Irvin, III, MD	2006
J. David Richardson, MD	2005
Josef E. Fischer, MD	2004
Stephen D. Leach, MD	2003
Charles E. Lucas, MD	2002
J. Wayne Meredith, MD	2001
Michael W. L. Gauderer, MD	2000
Glenn D. Steele, Jr., MD, PhD	1999
Layton F. Rikkers, MD	1998
Gregorio A. Sicard, MD	1997
John P. Delaney, MD, PhD	1996
Keith A. Kelly, MD	1995
Robert E. McAfee, MD	1994
Richard L. Simmons, MD	1993
David S. Mulder, MD	1992
Donald D. Trunkey, MD	1991
Lazer Greenfield, MD	1990
Erwin R. Thal, MD	1989
J. Patrick O'Leary, MD	1988
Robert W. Barnes, MD	1987
Jeremiah G. Turcotte, MD	1986
Steven G. Economou, MD	1985
Jerry M. Shuck, MD	1984
Robert E. Hermann, MD	1983
Ward O. Griffen, MD	1982
Robert Condon, MD	1981
Robert J. Freeark, MD	1980
John Glover, MD	1979
Robert Bartlett, MD	1978
J. Wesley Alexander, MD	1977
Raymond Read, MD	1976
*Hushang Javid, MD	1975
Alexander J. Walt, MD	1974
Warren H. Cole, MD	1973
Lester R. Dragstedt, MD	1972
Allan M. Lansing, MD	1971
Lester R. Dragstedt, MD	1962
Warren H. Cole, MD	1960

*\*First official  
Harridge Lecturer*

# In Remembrance

---

William A. Olorunto  
*Toledo, OH*

Robert T. Soper  
*Iowa City, IA*

# Notice of Change

---

Please make the following changes to my listing:

NAME

SPOUSE'S NAME

ADDRESS

ADDRESS

ADDRESS

CITY, STATE, ZIP

PHONE

FAX

E-MAIL

SURGICAL SPECIALTY

YEAR OF INDUCTION INTO MSA MEMBERSHIP

Send to: **Midwest Surgical Association**  
5019 W. 147th Street  
Leawood, KS 66224  
Telephone: 913-402-7102  
Fax: 913-273-9940  
Email: [info@midwestsurg.org](mailto:info@midwestsurg.org)  
Web: [www.midwestsurg.org](http://www.midwestsurg.org)

# Notice of Death

---

---

NAME

---

DATE

Send to: **Midwest Surgical Association**  
5019 W. 147th Street  
Leawood, KS 66224  
Telephone: 913-402-7102  
Fax: 913-273-9940  
Email: [info@midwestsurg.org](mailto:info@midwestsurg.org)  
Web: [www.midwestsurg.org](http://www.midwestsurg.org)



# Notes

---





# Notes

---

---