



WESTERN SURGICAL ASSOCIATION

2015 Annual Scientific Session

Saturday through Tuesday
November 7–10, 2015
Napa Valley, CA
Meritage Resort

Final Program

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

**BK Ultrasound
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**The Western Surgical Association
would like to thank the following exhibiting
companies for their generous support:**

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Western Surgical Association

**2015 ANNUAL
SCIENTIFIC
SESSION**

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WESTERN SURGICAL ASSOCIATION MISSION STATEMENT

The Western Surgical Association is dedicated to the cultivation, promotion, and diffusion of the art and science of surgery, to the sponsorship and maintenance of the highest standards of practice and to the delivery of the best possible care for the public. The goal of our continuing medical education effort is to provide information to the practicing surgeon that will enhance his/her knowledge regarding new diagnostic modalities and therapeutic maneuvers. The scope of our activities is meant to encompass the breadth of general surgery, including the primary and secondary components and is intended for our members and guests who are surgeons in academic and private practice. Our activities will focus on recent advances in basic science applicable to surgical practice, new developments in technology, issues in pre- and post-operative care; assessment of diagnostic accuracy and surgical outcomes; and critical analysis of the information provided.

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LOCATION

The Meritage Resort
Napa Valley, California

REGISTRATION

Saturday, November 7	3:00pm – 12:15pm
Sunday, November 8	7:00am – 12 Noon
Monday, November 9	7:00am – 5:00pm
Tuesday, November 10	7:30am – 11:30am

SCIENTIFIC SESSIONS

Sunday, November 8	7:30am – 12:15pm
Monday, November 9	8:00am – 4:15pm
Tuesday, November 10	8:00am – 11:30am

MEETING OBJECTIVES

1. Delineate the importance of new diagnostic and therapeutic modalities in surgery.
2. Prioritize treatment of surgical diseases with new operative and non-operative technologies and treatment options.
3. Elucidate the outcome of new surgical procedures.

CONTINUING MEDICAL EDUCATION CREDIT INFORMATION

Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American College of Surgeons and the Western 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 16.50 *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 10.75 credits meet the requirements for Self-Assessment.



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*Accredited with Commendation by the
Accreditation Council for Continuing Medical Education*

DISCLOSURE STATEMENT

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.

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MEMBERSHIP CANDIDATES ELECTED TO MEMBERSHIP AT THE ANNUAL MEETING NOVEMBER 2014

The Western Surgical Association Welcomes its New Members and their Spouses

Adnan Alseidi

Virginia Mason Medical Center

Melissa Kirkwood

UT Southwestern Medical Center, Dallas

Eugene Ceppa

Indiana University Medical Center

Cynthia Reyes

University of New Mexico School
of Medicine

Sharmila Dissanaik

Texas Tech University Health Sciences
Center

Flavio Rocha

Virginia Mason Medical Center

Barish Edil

University of Colorado School of Medicine

Jason Smith

University of Louisville School of Medicine

Mark Friedell

University of Missouri Kansas City
School of Medicine

Patricia Turner

American College of Surgeons

NavYash Gupta

NorthShore University HealthSystem

Daniel Vargo

University of Utah, Academy of
Health Science

Christopher Jones

Jewish Hospital

OFFICERS – 2015

PRESIDENT

William Chapman
St. Louis, Missouri

SECRETARY

R. James Valentine
Nashville, Tennessee

1ST VICE PRESIDENT

Wright Pinson
Nashville, Tennessee

TREASURER

Mark Talamonti
Evanston, Illinois

2ND VICE PRESIDENT

Samuel Snyder
Temple, Texas

RECORDER

Kelly McMasters
Louisville, Kentucky

EXECUTIVE COMMITTEE

PRESIDENT

William Chapman
St. Louis, Missouri

PAST PRESIDENT

Clive Grant
Colorado Springs, Colorado

SECRETARY

R. James Valentine
Nashville, Tennessee

DISTRICT REPRESENTATIVE

Karen Borman
Washington, DC

TREASURER

Mark Talamonti
Evanston, Illinois

DISTRICT REPRESENTATIVE

Margo Shoup
Warrenville, Illinois

RECORDER

Kelly McMasters
Louisville, Kentucky

DISTRICT REPRESENTATIVE

Daniel Margulies
Los Angeles, California

IMMEDIATE PAST PRESIDENT

Steven Stain
Albany, New York

DISTRICT REPRESENTATIVE

Peter Rhee
Tucson, Arizona

OTHER REPRESENTATIVES

**BOARD OF GOVERNORS,
AMERICAN COLLEGE OF
SURGEONS**

Karen J. Brasel
Portland, Oregon

**AMERICAN BOARD
OF SURGERY**

Gregory J. Jurkovich
Denver, Colorado

**ADVISORY COUNCIL ON
SURGERY, AMERICAN
COLLEGE OF SURGEONS**

David Farley
Rochester, Minnesota

MEMBERSHIP COMMITTEE – 2015

Anees Chagpar – *Chair*
Mark Faries
Steven De Jong
Thomas Aloia
Karen Borman
Margo Shoup
William Chapman, *Ex-Officio*
R. James Valentine, *Ex-Officio*
Mark Talamonti, *Ex-Officio*

PROGRAM COMMITTEE – 2015

Peter Rhee – *Chair*
Charles Scoggins
Anton Bilchik
M.B. Majella Doyle
Daniel Margulies
William Chapman, *Ex-Officio*
R. James Valentine, *Ex-Officio*
Kelly McMasters, *Ex-Officio*

**LOCAL ARRANGEMENTS
CHAIRMAN – 2015**

Alan W. Hemming
San Diego, California



Schedule of Events

SCHEDULE OF EVENTS

FRIDAY, NOVEMBER 6

6:30pm **Executive Committee Dinner** (invitation only) – Oakville Terrace

SATURDAY, NOVEMBER 7

8:00am – 12Noon **Executive Committee Meeting** – Salon X

3:00pm – 6:00pm **WSA Registration Open** – Vineyard Pre-Function

3:00pm – 5:00pm **Exhibitor Setup** – Salons I&II

5:30pm – 6:30pm **New Member Reception** – Rutherford Terrace

6:30pm – 8:30pm **Welcome Reception** – Vineyard Terrace

SUNDAY, NOVEMBER 8

7:00am – 8:00am **Continental Breakfast for Physicians** – Salons I&II

7:00am – 12:15pm **WSA Registration Open** – Vineyard Pre-Function

7:00am – 12Noon **Exhibits Open** – Salons I&II

7:30am – 10:00am **Scientific Session I** – Salons III - X

8:00am – 10:00am **Spouse/Guest Hospitality and Breakfast** – Rutherford Terrace

10:00am – 10:15am **Beverage Break** – Salon I&II

10:15am – 11:15am **Scientific Session I continued** – Salons III-X

11:15am – 12:15pm **Presidential Address: William Chapman, MD** – Salons III-X

12:30pm **Golf Tournament** (shotgun start) – Eagle Vines Golf Course

Afternoon **Open**

SCHEDULE OF EVENTS CONTINUED

MONDAY, NOVEMBER 9

<i>7:00am – 12Noon</i>	Exhibits Open – Salons I&II
<i>7:00am – 5:00pm</i>	WSA Registration Open – Vineyard Pre-Function
<i>7:00am – 8:00am</i>	ePoster Session with Continental Breakfast for Physicians – Salons I & II
<i>8:00am – 10:20am</i>	Scientific Session II – Salons III-X
<i>8:00am – 10:00am</i>	Spouse/Guest Hospitality and Breakfast – Rutherford Terrace
<i>10:20am – 10:30am</i>	Beverage Break – Salons I&II
<i>10:30am – 12:30pm</i>	Scientific Session III – Salons III-X
<i>12:30pm – 1:15pm</i>	VIDEO SESSION – Salons III -X
<i>12:30pm – 1:15pm</i>	Women in Surgery Luncheon – Siena Restaurant
<i>1:30pm – 3:30pm</i>	Special Discussion & Debate – Salons III-X
<i>3:30pm – 3:45pm</i>	Beverage Break – Salons I&II
<i>3:45pm – 4:15pm</i>	Quick Shots – Salons III-X
<i>4:15pm – 5:15pm</i>	Annual Business Meeting – Salons III-X
<i>7:00pm – 8:00pm</i>	President’s Reception – Vineyard Terrace
<i>8:00pm – 11:00pm</i>	President’s Dinner Dance (Black tie optional) – Estate Wine Cave

TUESDAY, NOVEMBER 10

<i>7:00am – 9:00am</i>	Continental Breakfast for Physicians and Spouses – Vineyard Terrace
<i>7:00am – 11:30am</i>	WSA Registration Open – Vineyard Pre-Function
<i>8:00am – 10:10am</i>	Scientific Session IV – Salons III-X
<i>10:10am – 10:20am</i>	Beverage Break – Vineyard Terrace
<i>10:20am – 11:30am</i>	Scientific Session IV cont. – Salons III-X
<i>11:30am</i>	Meeting concludes



Scientific Program

SCIENTIFIC PROGRAM

SUNDAY, NOVEMBER 8, 2015

<i>7:00am – 8:00am</i>	Continental Breakfast for Physicians
<i>7:00am – 12Noon</i>	WSA Registration Open
<i>7:00am – 12Noon</i>	Exhibits Open
<i>7:30am – 10:00am</i>	SCIENTIFIC SESSION I Moderator: President, William C. Chapman
<i>8:00am – 10:00am</i>	Spouse/Guest Hospitality and Breakfast

QUICK SHOTS

Revitalizing Vital Signs: The Role of Delta Shock Index

Ansab A. Haider, Bellal Joseph, Mazhar Khalil, Narong Kulvatunyou,
Terence O'Keeffe, Andrew Tang, Rifat Latifi, Lynn Gries, Gary Vercruysse,
Randall S Friese, Peter Rhee
University of Arizona

Interval Appendectomy - Finding the Breaking Point for Cost-Effectiveness

Lara Senekjian, Raminder Nirula
University of Utah

Silencing Porcine Carbohydrate Genes Significantly Reduces Human-Anti-Pig Cytotoxicity Profiles: An Alternative To Direct Complement Regulation

James R. Butler, Jose L Estrada, Luz M. Reyes, Gregory R. Martens,
Joseph M. Ladowski, Cesare Galli, Andrea Perota, Matthew Tector,
C. Max Schmidt, A. Joseph Tector
Indiana University School of Medicine

1. Prospective Randomized Trial of Pre-Operative Immunonutrition In Locally Advanced Pancreatic Cancer

Robert CG Martin II, Steven Agle, Melissa Schelegel, Jennifer Bonafede,
Traci Hayat, Charles R Scoggins, Kelly M McMasters, Prejesh Philips
University of Louisville

Invited Discussant: Matthew Katz, Houston, Texas

SCIENTIFIC PROGRAM CONTINUED

**2. Completion Lymph Node Dissection In Melanoma: Is There A
Therapeutic Effect?**

David Y. Lee, Briana J. Lau, Kelly T. Huynh, Devin C. Flaherty, Ji-Hey Lee,
Stacey L. Stern, Leland J. Foshag, Mark B. Faries
John Wayne Cancer Institute

Invited Discussant: Kelly McMasters, Louisville, Kentucky

**3. Multi-Institutional Study On The Natural History Of Large-Sized (≥3cm)
Branch-Duct Intraductal Papillary Mucinous Neoplasm**

Alexandra M. Roch, Eugene P. Ceppa, May C. Tee, George Marshall,
Gareth Morris-Stiff, Adnan Alseidi, Matthew Walsh, Michael B. Farnell,
C. Max Schmidt

Indiana University School of Medicine, Mayo Clinic, Cleveland Clinic,
Virginia Mason Medical Center

Invited Discussant: Barish Edil, Aurora, Colorado

**4. Prognostic Value of Circulating Tumor Cells Identified Prior To Surgical
Resection In Non-Metastatic Breast Cancer Patients**

Carolyn Hall, Lily Valad, Mandar Karhade, Jessica Bauldry, Henry Kuerer,
Sarah DeSnyder, Anthony Lucci

UT MD Anderson Cancer Center

Invited Discussant: Anees Chagpar, New Haven, Connecticut

INTRODUCTION OF NEW MEMBERS

**PRESENTATION OF “J. BRADLEY AUST AWARD” FOR BEST PAPER
BY A NEW MEMBER**

**RECIPIENT OF “J. BRADLEY AUST AWARD” 2014
BRIAN BADGWELL, MD, FACS**

10:00am – 10:15am **Beverage Break**

SCIENTIFIC PROGRAM CONTINUED

10:15am – 11:15am

SCIENTIFIC SESSION

Moderator: First Vice President, C. Wright Pinson

5. Does Hospital Experience Rather Than Volume Improve Outcomes In Geriatric Trauma Patients?

Olubode A. Olufajo, David Metcalfe, Arturo Rios-Diaz, Adil Shah,
Adil H. Haider, Joel S. Weissman, Ali Salim, Zara R Cooper
Brigham and Women's Hospital

Invited Discussant: James Boffa, Skokie, Illinois

6. Establishing Benchmarks For The Resuscitation of Traumatic Circulatory Arrest

Hunter B Moore, Ernest E Moore, Jeffery L Johnson, Walter L Biffl, Clay C Burlew,
Denis D Bensard, Carlton C Barnett, Frederic M Pieracci, Charles J Fox,
Gregory J Jurkovich, Angela Sauaia
University of Colorado

Invited Discussant: Jason Smith, Louisville, Kentucky

7. Single-Incision Laparoscopic Live Donor Nephrectomy In 148 Consecutive Nonselected Donors: Surgical Learning Curve And Implications For Patient Selection

Christoph Troppmann, Chandrasekar Santhanakrishnan, Kathrin Troppmann,
Richard Perez
University of California, Davis

Invited Discussant: Susan Orloff, Portland, Oregon

11:15am – 12:15pm

Introduction of President – C. Wright Pinson

PRESIDENTIAL ADDRESS

“New Directions in Surgical Training in the United States”

William C. Chapman, St. Louis, Missouri

12:15pm – 5:00pm

Open

SCIENTIFIC PROGRAM CONTINUED

MONDAY, NOVEMBER 9, 2015

7:00am – 8:00am	ePoster Session with Continental Breakfast for Physicians
7:00am – 5:00pm	WSA Registration Open
7:00am – 12Noon	Exhibits Open
7:00am – 8:00am	ePOSTER SESSION with Continental Breakfast for Physicians Moderators: Mark Friedell, Daniel Vargo, Sharmila Dissanaiké, Jason Smith

ePoster 2. The Post-Hospital Syndrome Predicts Readmission Following Outpatient Hernia Repair

Anai N. Kothari, Robert H. Blackwell, Ryan M. Yau, Matthew A.C. Zapf, Matthew Arffa, Zhiyong Mi, Gerard J. Abood, Paul C. Kuo

ePoster 3. Patient Reported Outcomes Accurately Measure the Value of an Enhanced Recovery Program in Liver Surgery

Ryan W. Day, Claudius Conrad, Jean-Nicolas Vauthey, Vijaya Gottumukkala, Thomas A. Aloia

ePoster 4. A New Measuring Stick for Appendicitis: Increased Anatomic Injury Describes Severity

Matthew Hernandez, Asad Choudhry, David Morris, Martin Zielinski

ePoster 6. Discordance Between SCIP Adherence and Postoperative Outcomes: Implications for Joint Commission Standards

Victor Chang, Robert H. Blackwell, Anai Kothari, Matthew Zapf, Gerard Abood, Gopal N. Gupta, Paul C. Kuo

ePoster 7. The Relationship Between Transverse Psoas Diameter and 3 Year Mortality in Liver Transplant Patients

Jared M Davis, Christopher Jones

SCIENTIFIC PROGRAM CONTINUED

ePoster 8. African Americans and Short-term Outcomes After Surgery for Crohn's Disease: An ACS- NSQIP Analysis

Elliot Arsoniadis, Yen-Yi Ho, Genevieve B Melton, Robert D Madoff, Chap Le, Mary R Kwaan

ePoster 11. 10-Year Trend In Crystalloid Resuscitation: Reduced Volume and Lower Mortality

Megan Y. Harada, Ara Ko, Galinos Barmparas, Beatrice J. Sun, Rodrigo F. Alban, Matthew B. Bloom, Daniel R. Margulies, Eric J. Ley

ePoster 12. Are Appendectomy Outcomes in Level 1 Trauma Centers As Good As We Think?

David Metcalfe, Olubode Olufajo, Arturo Rios-Diaz, Adil Haider, Joaquim Havens, Zara Cooper, Stephanie Nitzschke, Ali Salim

ePoster 14. Single Surgeon Comparison Between Laparoscopic vs Totally Robotic

Biliopancreatic Diversion with Duodenal Switch

Christopher Cummings, Stephen Marshall, Heather Howe, Roderick Yang, Steve VanderNaalt

ePoster 15. Integration of Clinical Documentation, Quality, Compliance, Financial and Information Technology Teams to Improve Clinical Documentation in a University Surgery Department

Alissa Greenbaum, Cynthia Reyes, Catherine Porto, Virginia Gleason, John Russell

ePoster 16. Outcomes in Complex Ventral Hernia Repair with Component Separation and Concomitant Panniculectomy

Jill B Smolevitz, Richard A Jacobson, Keith W Millikan

ePoster 17. Laparoscopic vs. Open Appendectomy: The Role of BMI

Charles J. Gibson, Carlos H. Rodriguez, Steven Zerilli, Terri Zomerlei, Murad Karadsheh, Joshua R Pfent

SCIENTIFIC PROGRAM CONTINUED

ePoster 18. The Relationship Between Serum Protein Markers and Outcomes after Burn Injury

Sharmila Dissanaiké, Chase Hansen, Kara Amazivca, N'érissa D Silva, Eneko Larumbe

ePoster 19. Hepatic Artery Reconstruction During Liver Resection For Malignancy

Alan W Hemming, Jennifer Berumen Ivan Zendejas, Jason Sicklick, Robert Barone, Kristin Mekeel,

ePoster 20. The Introduction of Total Laparoscopic Pancreaticoduodenectomy Into a Pancreas Program

Alessandro Pannicia, Richard D Schulick, Cheryl Meguid, Barish H. Edil

ePoster 21. Engaging Surgeons to Decrease Variable Costs in the Operating Room

Lindsey M. Korepta, M Ashraf Mansour, Jason D. Slaikeu, Carlos M. Rodriguez, Thomas Fluit

ePoster 23. Thoracic EndoVascular Aortic Repair for Symptomatic and Ruptured Thoracic Aneurysm and Penetrating Ulcers

Peter Beaulieu, M. Ashraf Mansour, Robert F. Cuff, Peter Y. Wong, Christopher M. Chambers, Jason D. Slaikeu, Stefano M. Bordoli

ePoster 24. Ethnic Disparities in Deceased Organ Donor Transplantation Rates

Xiang Gao, Mitchell B Sally, J Salvatore de la Cruz, Jamison Nielsen, Megan Crutchfield, Ali Salim, Darren J Malinoski

ePoster 27. Risk Factors for Ventral Hernia Recurrence After Repair – A Cohort Study with 5 Year Follow Up

Sharmila Dissanaiké, Michael Hanna, Stevenson Tsiao BS, Phillip Watkins

8:00am – 10:00am **Spouse/Guest Hospitality and Breakfast**

SCIENTIFIC PROGRAM CONTINUED

8:00am – 10:20am

SCIENTIFIC SESSION II

Moderator: President, William C. Chapman

8. Enoxaparin Adjusted By Anti-Xa Trough Level Reduces Clinically Evident VTE After Trauma

Ara Ko, Megan Y. Harada, Galinos Barmparas, Kevin Chung, Beatrice J. Sun, Russell Mason, Daniel R. Margulies, Eric J. Ley, Bruce L. Gewertz
Cedars-Sinai Medical Center

Invited Discussant: Brian Eastridge, San Antonio, Texas

9. Ca19-9 In Anatomically Resectable, Early Stage Pancreatic Cancer Is Independently Associated With Decreased Overall Survival And An Indication For Neoadjuvant Therapy: An Ncdb Study.

John R. Bergquist, Carlos A. Puig, Christopher R. Shubert, Elizabeth B. Habermann, Michael L. Kendrick, David M. Nagorney, Rory L. Smoot, Michael B. Farnell, Mark J. Truty
Mayo Clinic Rochester

Invited Discussant: W. Scott Helton, Seattle, Washington

10. Direct Peritoneal Resuscitation (Dpr) Reduces Inflammatory Mirnas After Hemorrhagic Shock (Hs)

Jason W. Smith, Jessica L. Weaver, Ryan T. Hurt, Cynthia D. Downard, Craig J. McClain, R. Neal Garrison, Paul J. Matheson AUST
University of Louisville

Invited Discussant: Ronald Stewart, San Antonio, Texas

11. Status of the Regional Nodal Basin Remains Highly Prognostic In Melanoma Patients With In-Transit Disease

Alexandra B Gonzalez, William S Harmsen, Vera J Suman, James W Jakub
Mayo Clinic, Rochester

Invited Discussant: Anthony Lucci, Houston, Texas

12. Preoperative Cholangitis And Liver Remnant Volume Determine The Risk Liver Failure In Patients Undergoing Resection For Hilar Cholangiocarcinoma

Dario Ribero, Giuseppe Zimmiti, Thomas A. Aloia, Junichi Shindoh, Forchino Fabio, Marco Amisano, Guillaume Passot, Alessandro Ferrero, Jean-Nicolas Vauthey
UT MD Anderson Cancer Center

Invited Discussant: David Nagorney, Rochester, Minnesota

SCIENTIFIC PROGRAM CONTINUED

13. Safety and Efficacy of Total Percutaneous Access for Fenestrated Endovascular Aortic Aneurysm Repair (FEVAR)

Carlos H. Timaran, Tarik Ali, Martyn Knowles, David E. Timaran, Shadman Baig AUST

University of Texas Southwestern Medical Center

Invited Discussant: Ashraf Mansour, Grand Rapids, Michigan

14. Predictors of Safety and Efficacy of Two Stage Hepatectomy for Bilateral Colorectal Liver Metastases

Guillaume Passot, Thomas Aloia, Daria Zorzi, Claudius Conrad, Kristoffer Brudvik, Jean-Nicolas Vauthey

UT MD Anderson Cancer Center

Invited Discussant: Flavio Rocha, Seattle, Washington

10:20am – 10:30am **Beverage Break**

10:30am – 12:30pm **SCIENTIFIC SESSION III**
Moderator: Samuel Snyder

15. Who Will Be Able To Perform Open Biliary Surgery In 2025?

Kenneth R. Sirinek, Kent R. Van Sickle, Wayne Schwesinger
University of Texas San Antonio

Invited Discussant: Sharmila Dissanaik, Lubbock, Texas

16. Outcomes of Combined Partial Hepatectomy and Cyst Fenestration For Massive Polycystic Liver Disease

Fouad T. Chebib, , Amber J. Harmon, Maria V. Irazabal, Yeonsoon Jung, Marie C. Hogan, Patrick S. Kamath, Vicente E. Torres, David M. Nagorney
Mayo Clinic Rochester

Invited Discussant: William C. Chapman, St. Louis, Missouri

SCIENTIFIC PROGRAM CONTINUED

17. Improving Mortality in Trauma Laparotomy Through the Evolution of Damage Control Resuscitation: Analysis of 1,030 Consecutive Trauma Laparotomies

Bellal Joseph, Bardiya Zangbar, Tahereh Orouji Jokar, Narong Kulvatunyong, Terence O’Keeffe, Andrew Tang, Rifat Latifi, Lynn Gries, Gary Vercruysse, Randall S. Frieze, Peter Rhee

University of Arizona

Invited Discussant: David Spain, Stanford, California

18. Cost-Effectiveness of Free Colonoscopies in an Uninsured Population Enriched for Colorectal Cancer

Erica Sutton, Charles W Kimbrough, Whitney F. Jones, Nikhil Borkhetaria, Brad S. Sutton

University of Louisville

Invited Discussant: John Garry, Fresno, California

19. Comparison of Multi-Detector Computed Tomography (MDCT) And Endoscopic Ultrasound (EUS) In Assessment Of Portal-Mesenteric Venous Involvement (PMV) In Patients With Localized Pancreatic Ductal Adenocarcinoma (PDAC)

Flavio G Rocha, Jesse Clanton, Stephen Oh, Emily Johnson, Stephen Kaplan, Adnan Alseidi, Thomas Biehl, Scott Helton, Vincent Picozzi, Russell Dorer, David Coy, Andrew Ross, Richard Kozarek

Virginia Mason Medical Center AUST

Invited Discussant: Robert Martin, Louisville, Kentucky

12:30pm - 1:15pm **VIDEO SESSION**

Liver Resection with Vascular Reconstruction Using Cold Perfusion

Alan W. Hemming, San Diego, California

Robotic Gastric Wedge Resection for Spindle Cell Neoplasm

Sherry M. Wren, Palo Alto, California

Management of Pancreatic Fluid Collections and Necrosis / Abscess with Flexible Endoscope

Gary C. Vitale, Louisville, Kentucky

SCIENTIFIC PROGRAM CONTINUED

Laparoscopic Major Vascular Resection for Pancreatic Ductal Adenocarcinoma
Michael Kendrick, Rochester, Minnesota

**Lesser Omental Space - An Alternative Approach to Spleen Preserving
Robotic Distal Pancreatectomy**
C. Max Schmidt, Indianapolis, Indiana

12:30pm – 1:15pm **WOMEN IN SURGERY LUNCHEON**

1:30pm - 3:30pm **SPECIAL DISCUSSION & DEBATE**
Moderator: Immediate Past President, Steven Stain

Introduction

“Academic Surgery, Where Do I Find the Time?”
Bellal Joseph, Tucson, Arizona

Special Discussion

**“The Best Medicine – Leadership Lessons That Make a
Difference in your Life and Career”**
Bruce Gewertz, Los Angeles, California

Panel Discussion

Debate: Robotic Surgery The Future Is Now Or Never?
Pro – Sherry Wren, Stanford, California
Con – Michael Kendrick, Rochester, Minnesota

3:30pm – 3:45pm **Beverage Break**

SCIENTIFIC PROGRAM CONTINUED

3:45pm

QUICK SHOTS

Moderator: Samuel Snyder

Predicting the Use of Postmastectomy Radiation Therapy in Breast Cancer Patients Treated with Mastectomy, Immediate Reconstruction, and Chemotherapy

Genevieve Hayek, Ali Sadeghi, Hugo St Hillaire, Chris Babycos, and George Fuhrman
Ochsner Clinic

National Prevalence of Deep Venous Thrombosis after Open Versus Laparoscopic Surgery

Matthew Whealon, Monica T Young, Alana Gebhart, Juan J Blondet, Michael Phelan, Ninh T Nguyen
University of California, Irvine

The Importance of Early Positive Cultures in Ventilated Trauma Patients

Galinos Barmparas, Eric J. Ley, Beatrice J. Sun, Dorothy A. Yim, Ara Ko, Megan Y. Harada, Rodrigo F. Alban, Daniel R. Margulies
Cedars-Sinai Medical Center

4:15pm – 5:15pm

Annual Business Meeting (Members Only)

7:00pm – 8:00pm

President’s Reception

8:00pm – 11:00pm

President’s Dinner Dance (Black Tie Optional)

SCIENTIFIC PROGRAM CONTINUED

TUESDAY, NOVEMBER 10, 2015

7:00am – 9:00am **Continental Breakfast for Physicians and Spouses**

7:00am – 12Noon **WSA Registration Open**

8:00am – 10:10am **Scientific Session IV**
Moderator: (President Elect)

20. Prognostic Utility Of Immunoprofiling In Colon Cancer: A Prospective, Multicenter Trial

Devin C. Flaherty, Simon Lavotshkin, John R. Jalas, Hitoe Torisu-Itakura,
Daniel D. Kirchoff, Myung S. Sim, Delphine J. Lee, Anton J. Bilchik
John Wayne Cancer Institute

Invited Discussant: Sean Glasgow, St. Louis, Missouri

21. Vulnerable Hospitals and Cancer Surgery Readmissions: Insights into the Unintended Consequences of the Patient Protection And Affordable Care Act (PPACA)

Young Hong, Chaoyi Zheng, Elizabeth Hechenbleikner, Lynt B. Johnson,
Nawar Shara, Waddah B. Al-Refaie
MedStar Georgetown University Hospital

Invited Discussant: Mary Kwaan, Minneapolis, Minnesota

22. Laparoscopic Totally Extraperitoneal Inguinal Hernia Repair Improves Quality Of Life At Two-Years Follow-Up

Matthew Gitelis, Francis DeAsis, John Linn, Woody Denham, Stephen Haggerty,
JoAnn Carbray, Ray Joehl, Tomokazu Kishiki, Michael Ujiki
NorthShore University HealthSystem

Invited Discussant: Rifat Latifi, Tucson, Arizona

23. A Systematic Review of the Mucosa-Associated Lymphoid Tissue (MALT) Variant of Primary Rectal Lymphoma: Is There an Optimal Treatment?

Melissa M. Felinski, Lala R. Hussain, Scott R. Kelley
Tri-Health Good Samaritan Hospital

Invited Discussant: William Cirocco, Columbus, Ohio

SCIENTIFIC PROGRAM CONTINUED

24. Inpatient Rehabilitation Following Liver Transplantation Decreases Risk And Severity Of 30-Day Readmissions

Anai N. Kothari, Ryan M. Yau, Robert H. Blackwell, Talar Markossian,
Matthew A.C. Zapf, Amy D. Lu, Paul C. Kuo
Loyola University

Invited Discussant: Christopher Jones, Louisville, Kentucky

25. Limited Patency of Covered Stents Placed for Traumatic Axillo-Subclavian Artery Injury

Atish Chopra, Greg Modrall, Martyn Knowles, Herbert A. Phelan,
R. James Valentine, Jayer Chung
University of Texas Southwestern Medical Center

Invited Discussant: Mark Friedell, Kansas City, Missouri

10:10am – 10:20am **Beverage Break**

26. Clinical Factors Can Predict Malignancy In Surgical Patients with Indeterminate Bethesda III and IV Thyroid Nodules

Josefina C. Farra, Danny Yakoub, Andrea R. Marcadis, Wei Zhao,
Tulay Koru-Sengul, John I. Lew
University of Miami

Invited Discussant: Richard Prinz, Evanston, Illinois

27. The Effect of Resident Involvement on Patient Outcomes in Complex Laparoscopic Surgery

Matthew Whealon, Monica T. Young, Michael J. Phelan, Ninh T. Nguyen
University of California, Irvine

Invited Discussant: David Borgstrom, Morgantown, West Virginia

28. Results of Simultaneous Liver-Kidney Transplant: A Single Center Review

MB Majella Doyle, Erin Maynard, Neeta Vachharajani, Jason Wellen,
Yiing Lin, Jeffrey Lowell, Surendra Shenoy, William Chapman
Washington University

Invited Discussant: Alan Hemming, San Diego, California

11:30am **Meeting Concludes**

SCIENTIFIC PROGRAM CONTINUED

PAST RECIPIENTS OF THE "J. BRADLEY AUST AWARD"

FOR BEST PAPER BY A NEW MEMBER

2014

Brian Badgwell
Houston, Texas

2013

James W. Jakub
Rochester, Minnesota

2012

Thomas A. Aloia
Houston, Texas

2011

M.B. Majella Doyle
St. Louis, Missouri

2010

Thomas Robinson
Aurora, Colorado

2009

Karen Borman
Abington, Pennsylvania

2008

Mark B. Faries
Santa Monica, California

2007

Jason B. Fleming
Houston, Texas

2006

Frank R. Arko
Dallas, Texas

2005

Donald E. Low
Seattle, Washington

2004

Samuel K. Snyder
Temple, Texas

2003

Nora Hansen
Santa Monica, California

2002

Mark S. Talamonti
Chicago, Illinois

2001

Kelly M. McMasters
Louisville, Kentucky

2000

M. Ashraf Mansour
Maywood, Illinois

1999

William C. Chapman
Nashville, Tennessee

1998

R. Stephen Smith
Ranoke, Virginia

Presenting author must be a new WSA member within the past 2 years in order to qualify for the J. Bradley Aust Award.



Abstracts

Individual abstracts of the papers to be presented at this year's annual meeting appear on the following pages:

ABSTRACTS

FIRST SCIENTIFIC SESSION | Sunday, November 8, 2015 | 7:30am – 12:15pm

Prospective Randomized Trial of Pre-Operative Immunonutrition in Locally Advanced Pancreatic Cancer

Robert CG Martin II, Steven Agle, Melissa Schelegel, Jennifer Bonafede, Traci Hayat, Charles R Scoggins, Kelly M McMasters, Prejesh Philips
University of Louisville

Background: Preoperative immunonutrition has been shown to decrease the length of stay (LOS) and complications among patients(pts) that undergo elective gastrointestinal cancer surgeries. The purpose of this study was to determine whether preoperative immunonutrition supplement decreases postoperative LOS, infectious complications, and morbidity in patients undergoing irreversible electroporation(IRE) surgery for locally advanced pancreatic cancer(LAPC)

Hypothesis: Preoperative immunonutrition prior to treatment for LAPC will reduce complications and LOS

Design: Prospective randomized study (2:1) randomization of pts receiving immunonutrition or standard nutritional education 6-days prior to surgery

Setting: Single institution tertiary referral academic center

Patients and Methods: Seventy-one pts w/ LAPC randomly divided into receiving preoperative immunonutrition (n=44) or no supplemental preoperative immunonutrition (n=27).

Results: Pts similar for pre-operative nutrition parameters and operative therapy.

Characteristics (n=69)	Pre-op Nutritional Supplement (N=42)	Patient w/o Supplement (N=27)	P-Value
Age	60 (27-81)	62 (47-75)	ns
Gender (Male/ Female)	29/23	12/15	ns
Body Mass Index	26.5 (19.3-34.2)	25.8 (20.4-31.5)	ns
Nutritional Demographics			
Weight Loss (Y/N)	Yes:38 No 4	Yes:23 No:4	ns
Median Loss (lbs)	6 (2-28)	5 (3-22)	
Median Albumin	2.8 (2.3 – 3.4)	3 (2.7-3.6)	
Median Pre-albumin	17 (11-28)	17 (14-3.7)	

Pts in the immunonutrition group experienced a statistically significant decrease in post-operative complications (p=0.05) and LOS (10.7 vs. 17.4, p=0.01), and less of a decrease in post-surgery prognostic nutrition index(-12.6 vs. -16.2, p=0.03) and albumin levels (-1.1 vs. -1.5, p<0.01).

Conclusion: Pre-operative immunonutrition was clinically significant in decreasing post-operative complications, LOS, and improving post-surgery PNI and albumin levels in patients receiving elective IRE treatment of non-resectable pancreatic or liver cancer. These results indicate that preoperative immunonutrition is effective and feasible in this subset of cancer patients.

ABSTRACTS CONTINUED

FIRST SCIENTIFIC SESSION | Sunday, November 8, 2015 | 7:30am – 12:15pm

Completion Lymph Node Dissection in Melanoma: Is There a Therapeutic Effect?

David Y. Lee, Briana J. Lau, Kelly T. Huynh, Devin C. Flaherty, Ji-Hey Lee, Stacey L. Stern, Leland J. Foshag, Mark B. Faries

John Wayne Cancer Institute

Background: The utility of completion lymph node dissection (CLND) for positive sentinel lymph node biopsy (SNB) is controversial.

Hypothesis: CLND provides clinical benefits for positive SNB in melanoma.

Design: Retrospective review of prospective database.

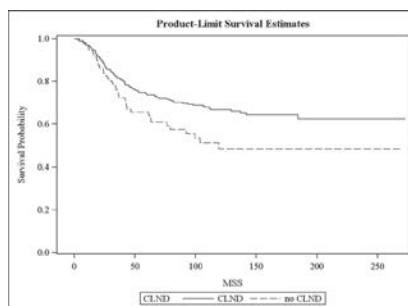
Setting: Melanoma referral center.

Patients and Methods: Outcomes of patients with positive SNB from 1991 to 2013 were reviewed, comparing those who had immediate CLND to those who did not (observation patients, OBS).

Results: There were 471 patients who had positive SNB with 375 (80%) in the CLND group and 96 (20%) in the OBS group. The groups were similar except the OBS group was older (57.6 vs. 52.9 years, $p=0.026$) and had more sentinel nodes removed (2.9 vs 2.4, $p=0.034$). Five-year regional free recurrence was significantly better in the CLND group compared to the OBS group (93% vs 84%, $p=0.005$). The 5 and 10 year distant metastasis free survival was similar between the CLND and the OBS group (73% vs 68%, $p=0.421$). Melanoma specific survival (MSS) was superior in the CLND group; 5-year MSS was 74 vs 66%, $p=0.12$ and 10-year MSS 67 vs 48%, $p=0.015$. (Figure-1) On multivariate analysis, CLND was associated with improved MSS (HR 0.6, 95%CI 0.4-0.9, $p=0.011$) and lower regional recurrence (HR 0.5, 95% CI 0.2-0.9, $p=0.016$). Increased Breslow thickness, older age, ulceration, and trunk primary site were also associated with worse outcomes.

Conclusion: Immediate CLND after positive SNB improved MSS and nodal recurrence. This difference only became significant with more than 5 years of follow up. This clinical question may remain controversial until the results of the second Multicenter Selective Lymphadenectomy Trial become available.

Figure-1- Melanoma specific comparison between OBS and CLND group
CLND= Completion lymph node dissection,
OBS= observation.



CLND= 471 OBS= 96 log-rank $p = 0.015$

ABSTRACTS CONTINUED

FIRST SCIENTIFIC SESSION | Sunday, November 8, 2015 | 7:30am – 12:15pm

Multi-Institutional Study on the Natural History of Large-Sized (≥ 3 CM) Branch-Duct Intraductal Papillary Mucinous Neoplasm

Alexandra M. Roch, Eugene P. Ceppa, May C. Tee, George Marshall, Gareth Morris-Stiff, Adnan Alseidi, Matthew Walsh, Michael B. Farnell, C. Max Schmidt

Indiana School of Medicine, Mayo Clinic, Cleveland Clinic, Virginia Mason Medical Center

Background: The association between size and malignant potential for branch-duct intraductal papillary mucinous neoplasm (BD-IPMN) is controversial.

Hypothesis: We hypothesized that the natural history of large-sized BD-IPMN (≥ 3 cm) had similar outcomes than that of small BD-IPMN (< 3 cm).

Setting: From 2006 to 2014 at 4 academic high-volume medical centers.

Design: Prospectively followed patients who underwent primary surveillance of BD-IPMN ≥ 3 cm.

Patients and Methods: Diagnosis of BD-IPMN was based on imaging [multifocality, main duct (MD) connection], cyst fluid analysis, and/or cytology. Patients with MD ≥ 5 mm or < 6 months surveillance were excluded. Indications for surveillance included comorbidities, patient preference or absence of additional International Consensus Guidelines worrisome features/high-risk stigmata (ICG-WF/HR).

Results: Sixty-three patients with BD-IPMN ≥ 3 cm were followed for a median of 38months (8-103). Median maximal diameter was 3.3cm (3-11) at diagnosis, and 3.9cm (3-10) at last follow-up. During surveillance, BD-IPMN size increased in 37 patients (59%). Forty-one patients were managed with primary surveillance alone, whereas 22 underwent resection during follow-up [after median of 13 months (6-75)] for size increase (n=15), symptoms (n=5), cytology (n=1), and DNA profile change (n=1). Surgical pathology revealed low/moderate-grade dysplasia in 18 and high-grade dysplasia in 4 patients (29% and 6%, respectively). No significant difference in malignancy was observed in patients with symptoms, size increase or additional ICG-WF/HR. No patient developed invasive carcinoma. Twelve (19%) deaths occurred, none of them related to IPMN.

Conclusion: This multi-institutional prospective series reports a better disease-specific prognosis of large-sized BD-IPMN than previously published in retrospective surgical series. Increase in BD-IPMN size during surveillance does not predict primary surveillance failure. Primary surveillance may be a reasonable option in select patients with BD-IPMN ≥ 3 cm.

ABSTRACTS CONTINUED

FIRST SCIENTIFIC SESSION | Sunday, November 8, 2015 | 7:30am – 12:15pm

Prognostic Value of Circulating Tumor Cells Identified Prior to Surgical Resection in Non-Metastatic Breast Cancer Patients

Carolyn Hall, Lily Valad, Mandar Karhade, Jessica Bauldry, Henry Kuerer, Sarah DeSnyder, Anthony Lucci
UT MD Anderson Cancer Center

Background: Circulating tumor cells (CTCs) can be identified in approximately 25% of non-metastatic breast cancer patients (BC), and data are emerging regarding their prognostic significance.

Hypothesis: We hypothesized that CTCs identified prior to resection of the primary tumor would predict worse outcome in non-metastatic BC patients.
Design: One 7.5 mL peripheral blood sample was collected for CTC enumeration at the time of primary surgery, just prior to primary tumor resection.

Setting: This work was performed at a single tertiary institution.

Patients and Methods: We evaluated 510 patients with non-metastatic (stage I-III) BC as part of an IRB approved study. We obtained informed written consent from all patients prior to blood collection. Individual patient results were blinded from investigators by use of a random number identifier. Patients with bilateral breast cancer or any other malignancy within the five years of the diagnosis of the current cancer were ineligible. CTCs (per 7.5 ml blood) were identified using the Cell Search[®] System (Janssen) and were defined as nucleated cells lacking CD45 but expressing cytokeratins (CK) 8, 18, or 19. The presence of ≥ 1 CTC meeting morphological criteria for malignancy was considered a positive result. Log-rank test and Cox regression analysis were applied to establish the association of CTCs with relapse-free and overall survival.

Results: Median follow-up was 48 months and mean age was 53 years. Fifty-nine percent of patients (300/510) had tumors >2 cm, and 46% (235/510) had positive lymph nodes. One hundred sixty-eight patients received neoadjuvant chemotherapy (NACT) prior to CTC assessment, and 342 patients were chemo naïve. One or more CTC was identified in 45/168 (27%) of NACT treated patients, and in 80/342 (23%) of chemo naïve patients. CTCs were not associated with tumor size, grade, or lymph node status. Detection of one or more CTCs predicted decreased relapse-free (log-rank $P=0.0003$, HR = 2.69, 95% CI, 1.55 to 4.67; $P = 0.0007$) and overall survival (log-rank $P=0.02$, HR = 2.26, 95% CI, 1.11 to 4.62; $P = 0.03$).

Conclusion: One or more CTCs identified prior to resection of the primary breast tumor predicted worse relapse-free and overall survival, irrespective of primary tumor size, grade, or lymph node positivity.

ABSTRACTS CONTINUED

FIRST SCIENTIFIC SESSION | Sunday, November 8, 2015 | 7:30am – 12:15pm

Does Hospital Experience Rather Than Volume Improve Outcomes in Geriatric Trauma Patients?

Olubode A. Olufajo, David Metcalfe, Arturo Rios-Diaz, Adil Shah, Adil H. Haider, Joel S. Weissman, Ali Salim, Zara R Cooper
Brigham & Women's Hospital

Background: Although high absolute hospital geriatric trauma volume is associated with improved outcomes among geriatric patients, it is not clear if the relative geriatric trauma volume predicts outcomes better.

Hypothesis: Hospitals treating relatively more older patients than younger patients will have better outcomes among geriatric trauma patients.

Design: Retrospective longitudinal study

Setting: California State Inpatient Database, 2007 – 2011; American Hospital Association database.

Methods: Patients (65 years and older) with ICD-9 diagnosis codes corresponding to traumatic injuries were identified. Demographic, admission, and hospital characteristics were included. Proportions of geriatric trauma patients seen were divided into tertiles. To exclude outliers, hospitals with < 25 annual overall trauma volume and < 5% geriatric trauma admissions were excluded. Outcomes were in-hospital mortality and 30-day readmission rates. Independent risk factors were assessed with clustered logistic regression models adjusted for age, sex, race, injury severity score, length of stay, Charlson score, disposition, trauma center level, teaching status, annual geriatric trauma volume, and proportion of geriatric trauma admissions.

Results: There were 66,272 geriatric trauma patients included from 63 trauma centers. The annual geriatric trauma volume ranged from 16 to 557. The mean proportions of geriatric trauma admissions for each tertile were 21.3%, 38.7%, and 54.9% respectively. The overall in-hospital mortality rate was 4.85% and 30-day readmission rate was 14.36%. The adjusted Odds Ratio and 95% Confidence Intervals for in-hospital mortality per 100 increase in geriatric trauma volume was 0.92 (0.85 – 1.00). Compared to the 1st tertile, the adjusted odds of mortality in the 3rd tertile was 0.74 (0.60 – 0.93). None of the hospital factors measured were significantly associated with readmission. The Wald test revealed that the proportion of geriatric trauma admission variable contributed more to the predictive power of the hospital mortality model than the geriatric trauma volume variable ($P = 0.009$ vs. $P = 0.0332$).

Conclusion: Increased hospital survival is seen among geriatric trauma patients admitted at hospitals that routinely treat relatively more older patients than younger patients. These results suggest that the creation of specialized centers for geriatric trauma care may be beneficial to geriatric trauma patients.

ABSTRACTS CONTINUED

FIRST SCIENTIFIC SESSION | Sunday, November 8, 2015 | 7:30am – 12:15pm

Establishing Benchmarks for the Resuscitation of Traumatic Circulatory Arrest

Hunter B Moore, Ernest E Moore, Jeffery L Johnson, Walter L Biffl, Clay C Burlew, Denis D Bensard, Carlton C Barnett, Frederic M Pieracci, Charles J Fox, Gregory J Jurkovich, Angela Sauaia
University of Colorado

Background: Endovascular hemorrhage control (EHC) has been proposed as an alternative approach to salvage patients who present to hospital in circulatory arrest following massive blood loss rather than the traditional emergency department thoracotomy (EDT). While endovascular control is an appealing minimally invasive procedure, it does not provide access for control of thoracic injuries, relief of cardiac tamponade, or internal cardiac massage in patients with profound hypovolemia. The maximally invasive EDT, addresses all three of these needs. Benchmarking contemporary outcomes of the EDT based on injury patterns and mechanisms is warranted to define the optimal indications for EHC rather than eliminating EDT from clinical practice.

Hypothesis: EDT survival remains a success procedure for penetrating thoracic injuries, but has limited utility in patients with blunt abdominal trauma, particularly in patient undergoing pre hospital cardiopulmonary resuscitation.

Design: Prospective observational cohort study

Setting: Level I urban trauma center from 1974-2014

Patients and Methods: Forty years of consecutive trauma patients undergoing EDT. Logistic regression to predict survival based off of the predictor variables: pre hospital cardiopulmonary resuscitation (CPR), mechanism of injury, injury pattern, patient demographics, and decade EDT was performed.

Results: 1660 EDTs were performed during the study period, with 101 survivors (6.0%). 1394 (79%) of these patients had pre hospital CPR and 54% (900) had penetrating injuries. The most injury common injury patterns were isolated chest (29%), multisystem with head injury (27%) and multisystem without head (21%). Penetrating mechanism of injury is associated with a higher survival rate than blunt (8.7% vs 3% $p<0.001$). In patients with no pre hospital CPR penetrating chest had a 38% survival and with CPR was reduced to 6%. Isolated penetrating abdominal had the lowest survival at 2% with no pre hospital CPR and 0.2% with CPR. Survival markedly increased during the study period from 1975-1979 (4.9%) to 2010-2014 (12.0%).

Conclusion: Patients with pre hospital CPR had nearly 1/6th the survival rate of patients with similar injury patterns without pre hospital cardiac arrest. Those patients with chest injuries and multisystem trauma without head injuries had the highest survival. Those patients with isolated abdominal trauma had the lowest survival. When considering replacement of EDT with ECH, it is essential to take in consideration of the patient's injury pattern and pre hospital hemodynamic status. Abdominal and blunt trauma appears to be the most promising patient population to use adjunctive endovascular hemorrhage control.

ABSTRACTS CONTINUED

FIRST SCIENTIFIC SESSION | Sunday, November 8, 2015 | 7:30am – 12:15pm

Single-Incision Laparoscopic Live Donor Nephrectomy in 148 Consecutive Nonselected Donors: Surgical Learning Curve and Implications for Patient Selection

Christoph Troppmann, Chandrasekar Santhanakrishnan, Kathrin Troppmann, Richard Perez

University of California, Davis

Background: Single-incision laparoscopic live donor nephrectomy (LapNeph) is a new and more complex technique than traditional multi-port LapNeph.

Hypotheses: 1.) Single-incision LapNeph is effective for recovery of live donor kidneys regardless of donor characteristics. 2.) Single-incision LapNeph has a prolonged learning curve.

Setting: High-volume transplant program at a tertiary care academic health center.

Patients and Methods: We studied our first 148 consecutive nonselected single-incision donors 01/2010—09/2013 (vertical 5-cm periumbilical midline incision). All procedures were done by a single surgeon with >10 years of experience in multi-port LapNeph. The initial portion (n=114 cases) of this series involved surgery residents as assistants, the remaining part involved active teaching of a junior transplant faculty member (n=34 cases). We reviewed donor operation learning-curve relevant perioperative events (eg, conversion to multi-port or open procedure, renovascular injury, blood transfusion, re-operation, wound complication). We analyzed outcomes in three groups: (i) senior faculty learning curve: first 57 cases (Group 1) versus second 57 cases (Group 2) and (ii) impact of teaching (Group T, n=34 cases).

Results: For the 148 donors (39% male), mean age was 43 years, mean weight was 75 kg, mean BMI was 26.2 (range, 18-34 kg/m²); 93% had left-sided nephrectomy and 20% had multiple renal arteries. We noted 7 graft losses at 8 to 39 months post-transplant (98.7% 1-yr graft survival). Other outcomes (* and †: p<0.05 for pairwise group comparisons [t-Test]; all other p=n.s.):

OUTCOMES	Group 1 (Case #1- #57) n=57	Group 2 (Case #58-#114) n=57	Group T (Case #115- 148) n=34
Donors			
Mean operating time [min]	256*	233*	249
Mean warm ischemic time [min]	6*	4*	6*
≥1 non-wound complication learning curve event, n	8 (14%)	6 (11%)	4 (12%)
≥1 wound complication learning curve event, n	4 (7%)	6 (11%)	2 (6%)
—incisional hernia, n	3 (5%)	2 (4%)	1 (3%)
Recipients			
Delayed graft function, n	1 (2%)	1 (2%)	1 (3%)
Ureteral complication (incl. stricture), n	1 (2%)	--	3 (10%)
Technical graft loss (incl. thrombosis), n	--	--	--

Conclusion: Single-incision LapNeph had a long learning curve (>50 cases), likely reflecting this particular procedure’s intrinsic technical complexity. Nonetheless, it resulted in excellent donor and recipient outcomes. As experience increased, incisional hernia and other wound complication rates did not decrease, suggesting that any preexisting periumbilical fascial pathology (eg, rectus diastasis, umbilical hernia) should inform selection of donors for single-incision LapNeph.

ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Enoxaparin Adjusted By Anti-Xa Trough Level Reduces Clinically Evident VTE After Trauma

Ara Ko, Megan Y. Harada, Galinos Barmparas, Kevin Chung, Beatrice J. Sun, Russell Mason, Daniel R. Margulies, Eric J. Ley, Bruce L. Gewertz
Cedars-Sinai Medical Center

Background: Trauma patients are at high risk for developing deep venous thrombosis (DVT). DVT rate when enoxaparin is dosed by anti-Xa trough level is not well described.

Hypothesis: Targeting a therapeutic anti-Xa trough level by adjusting the enoxaparin dose will reduce the DVT rate in trauma patients.

Design: Single institution, prospective comparison study.

Setting: Urban, Level 1 trauma center

Patients and Methods: Trauma patients prospectively enrolled from 08/2014 to 05/2015 who received enoxaparin that was adjusted by anti-Xa trough level (ADJUST) were compared to those enrolled from 11/2013 to 05/2014 who received enoxaparin 30mg BID (CONTROL). Anti-Xa trough levels were monitored in those receiving 3 or more consecutive doses of enoxaparin 30 mg BID. Patients with trough level ≤ 0.1 IU/mL received enoxaparin increased by 10mg increments. Trough level was re-evaluated 3 doses after enoxaparin adjustment. Patients with preexisting DVT were excluded.

Results: A total of 210 patients were studied, 88 ADJUST and 122 CONTROL, with similar baseline characteristics. Subtherapeutic anti-Xa troughs were noted in 81% of ADJUST and these patients received a median of 1 incremental adjustment to enoxaparin 40mg BID. Incidence of VTE was greater in CONTROL (7% vs 1%, $p=0.048$). No difference was noted in rate of blood cell transfusion or discharge hematocrit.

Conclusion: Subtherapeutic anti-Xa trough levels are common in trauma patients and enoxaparin dose adjustment led to a reduced rate of DVT.

Variable	ADJUST (n=88)	CONTROL (n=122)	p-value
Age (year)	43.6 \pm 19.7	39.5 \pm 17.1	0.239
Head AIS	1.1 \pm 1.7	0.7 \pm 1.4	0.081
ISS	17.5 \pm 10.5	15.6 \pm 13.3	0.312
ICU Admit (%)	60 (68%)	67 (55%)	0.061
Hospital LOS	13.0 \pm 10.6	11.5 \pm 9.8	0.298
Prbc transfusion rate	7%	13%	0.174
Discharge HCT	34.4 \pm 6.4	33.4 \pm 7.0	0.315
DVT (%)	1 (1%)	9 (7%)	0.048

ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

CA19-9 in Anatomically Resectable, Early Stage Pancreatic Cancer is Independently Associated With Decreased Overall Survival and an Indication for Neoadjuvant Therapy: An NCDB Study

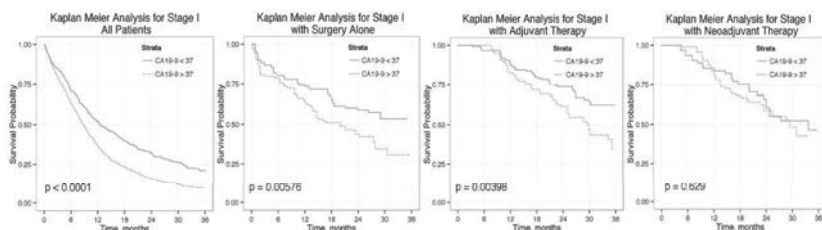
John R. Bergquist, Carlos A. Puig, Christopher R. Shubert, Elizabeth B. Habermann, Michael L. Kendrick, David M. Nagorney, Rory L. Smoot, Michael B. Farnell, Mark J. Truty
Mayo Clinic Rochester

Introduction: It remains unclear how to triage patients with elevated CA19-9 in anatomically resectable early stage pancreatic ductal adenocarcinoma (PDAC). We hypothesized that any elevation of CA 19-9 above normal should be considered biologically borderline resectable.

Methods: The National Cancer Data Base (2004-2011) was reviewed for patients with PDAC and measured CA 19-9. Non-secretors were analyzed separately. Stage I patients were stratified by CA 19-9 above and below normal reference range (37 U/mL). Unadjusted Kaplan-Meier analysis and adjusted Cox proportional hazards modeling were performed.

Results: 71024 patients with measured CA 19-9 were identified. Stage-specific survival was decreased in all stages for CA19-9 secretors compared to non-secretors, and this effect was most prominent in Stage I. Among Stage I patients (N=4063), 388 (9.5%) were non-secretors, 911 (22.5%) had normal levels, and 2764 (68%) had elevated levels. Demographics and peri-operative outcomes were similar between groups. Overall survival for patients with elevated CA19-9 was worse at 1, 2, and 3 years (36% vs. 50%, 16% vs. 31%, 9% vs. 21%, all $p < 0.001$), even with resection and adjuvant therapy (see figure). Adjusted survival modeling revealed elevated CA 19-9 independently confers increased mortality hazard (HR 1.41, $p < 0.0001$). Repeat modeling in the neoadjuvant cohort demonstrated abrogation of this increased mortality hazard ($p = 0.46$).

Conclusions: CA19-9 non-secretors have the best prognosis regardless of stage. CA19-9 elevation independently predicts increased mortality, particularly in Stage I patients. Neoadjuvant therapy mitigates this effect. We propose patients with CA19-9 elevation above normal at diagnosis are biologically borderline, regardless of anatomic resectability, and neoadjuvant therapy be considered in this population.



ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Direct Peritoneal Resuscitation (DPR) Reduces Inflammatory miRNAs after Hemorrhagic Shock (HS)

Jason W. Smith, Jessica L. Weaver, Ryan T. Hurt, Cynthia D. Downard, Craig J. McClain, R. Neal Garrison, Paul J. Matheson

University of Louisville

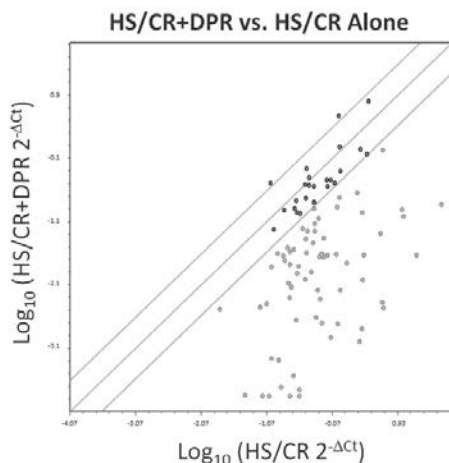
Background: MicroRNAs (miRNAs) are small segments of non-coding RNA that regulate gene expression and protein function, and thus are key regulators of cellular processes including those of the inflammatory cascade following HS. We have previously shown that DPR, when given with traditional i.v. fluid resuscitation to restore intravascular volume, improves visceral blood flow and reduces pro-inflammatory cytokines released during HS. The effects of DPR on miRNA expression patterns following resuscitated HS are not known.

Hypothesis: DPR, which improves visceral blood flow and prevents organ edema after HS, will reduce expression of pro-inflammatory miRNAs.

Methods: Male Sprague-Dawley rats were divided into 3 groups: 1) Sham (no HS); 2) Conventional Resuscitation (CR; HS, then resuscitated with shed blood and 2 volumes of saline); 3) DPR (CR plus 30cc peritoneal dialysis solution). Liver blood flow (LBF) was estimated by galactose clearance, and miRNAs were measured using RT-PCR.

Results: Despite restored hemodynamics after CR, LBF dropped, but addition of DPR normalized LBF. DPR also downregulated miRNA (68/92 compared to 2/92 upregulated compared to CR alone, $*P < 0.01$).

Conclusion: Adding DPR downregulated inflammatory miRNAs compared to CR alone, which suggests that this simple clinical intervention can prevent the activation of the inflammatory cascade before it has a chance to begin. Use of DPR for the resuscitation of patients in HS should reduce systemic inflammation to improve patient outcomes after hemorrhage.



ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Status of the Regional Nodal Basin Remains Highly Prognostic in Melanoma Patients with In-Transit Disease

Alexandra B Gonzalez; William S Harmsen; Vera J Suman; James W Jakub
Mayo Clinic Rochester

Background: The role of sentinel lymph node biopsy (SLNBx) in the management of patients with in-transit melanoma remains unknown. The objective of this study was to identify the rate of occult nodal disease in patients undergoing surgical nodal staging for in-transit disease. The prognostic significance of nodal status in this stage III population is described, specifically, its impact on overall survival (OS), disease-free survival (DFS) and distant metastasis-free survival (DMFS), to better define the role of SLNBx for this disease.

Hypothesis: Microscopic nodal disease is common in patients with in-transit disease with clinically negative regional lymph nodes and nodal status remains a prognostic indicator of recurrence and survival in this patient population.

Design: Retrospective cohort

Setting: Single tertiary referral institution

Patients and Methods: Patients presenting with in-transit melanoma, without evidence of distant metastatic disease over a 10 year time frame (5/2005 - 9/2014) were evaluated. 261 patients with in-transit disease treated at our center were identified. We limited our analysis to patients with a first time in-transit event who underwent surgical excision. Nodal status was determined by clinical assessment only or by surgical staging at time of excision with either SLNBx or elective lymph node dissection (ELND). Associations between clinicopathologic characteristics, patterns of recurrence and survival were analyzed.

Results: A total of 159 patients met inclusion criteria, of which 137 (86%) presented with no clinical evidence of nodal disease. At time of surgical excision, 80 (58%) clinically node negative patients had observation of the nodal basin, whereas 57 (42%) patients underwent surgical nodal staging, with 20 (35.1%) found to have microscopic nodal disease. Patients with synchronous clinical nodal disease were 9.9 times more likely to suffer distant failure ($p < 0.0001$) and the risk of death was 4.3 times as high as that of patients without microscopic disease ($p = 0.001$). DMFS was significantly better for surgically staged node negative patients, with a median of 70.8 versus 19.2 months for surgically staged node positive patients with micrometastasis, 22.8 months for those staged node negative by clinical examination only, and 4.8 months for those with synchronous nodal disease ($p = 0.01$) (Figure 1). Those who did not undergo surgical staging were two times more likely to experience distant recurrence than surgical node negative patients. ($p = 0.01$)

Conclusion: Patients with in-transit disease are at high risk of occult nodal metastasis and accurate staging with SLNBx should be considered. Despite in-transit recurrence representing stage III disease, the status of the regional basin is strongly prognostic. Clinical exam is unreliable and clinically node negative patients behave more similar to patients with nodal micrometastasis than those with pathologically negative lymph nodes. Identifying nodal metastasis in this population might influence patient management or eligibility for clinical trials.

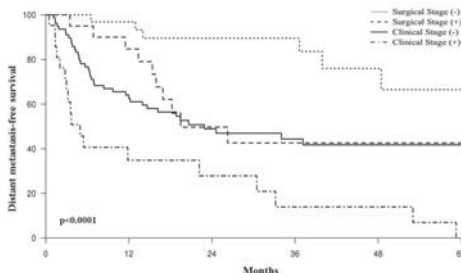


Figure 1

ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Preoperative Cholangitis and Liver Remnant Volume Determine the Risk Liver Failure in Patients Undergoing Resection for Hilar Cholangiocarcinoma

Dario Ribero, Giuseppe Zimmiti, Thomas A. Aloia, Junichi Shindoh, Forchino Fabio, Marco Amisano, Guillaume Passot, Alessandro Ferrero, Jean-Nicolas Vauthey
UT MD Anderson Cancer Center

Background: The highest mortality rates after liver surgery are reported in patients who undergo resection for hilar cholangiocarcinoma (HCCA). In these patients, postoperative death usually follows the development of hepatic insufficiency ($H_{ep} I_{ns}$).

Hypothesis: To determine the factors associated with postoperative $H_{ep} I_{ns}$ and liver failure in patients undergoing hepatectomy for HCCA.

Design: Consecutive patients undergoing hepatectomy for HCCA.

Setting: Two tertiary care centers between 1996 and 2013.

Patients and Methods: All consecutive patients who underwent hepatectomy with curative intent for HCCA were evaluated. Preoperative clinical and operative data were analyzed to identify independent determinants of *i*) $H_{ep} I_{ns}$ (defined as postoperative $_{peak} Bil > 7$ mg/dl or, in jaundiced patients, increased bilirubin on postoperative day 5 or thereafter) and *ii*) liver failure.

Results: In all, 133 patients with right or left major ($n=67$) or extended ($n=66$) hepatectomies were included. Preoperative biliary drainage was performed in 98 patients (85.2% of those with jaundice at diagnosis) and was complicated by cholangitis in 40 cases (40.8%). In all these patients, cholangitis was controlled before surgery. Major (Dindo III-IV) postoperative complications occurred in 73 patients (54.8%), with 29 (21.8%) suffering from $H_{ep} I_{ns}$. Fifteen (11.2%) patients died within 90 days after surgery, with 10 deaths (8.3%) determined by liver failure. On multivariate analysis, predictors of postoperative $H_{ep} I_{ns}$ (all $p < 0.05$) were preoperative cholangitis (odds ratio [OR]=4.1), future liver remnant (FLR) volume $< 30\%$ (OR=3.5), preoperative total bilirubin > 3 mg/dl (OR=4.3), and albumin < 3.5 mg/dl (OR=4.4). Only preoperative cholangitis (OR=11.9, $p=.026$) and FLR $< 30\%$ (OR=8.1, $p=.018$) emerged as risk factors for postoperative liver failure-related death.

Conclusion: Preoperative cholangitis and insufficient FLR volume are major determinants of $H_{ep} I_{ns}$ and postoperative liver failure death. Given the association between biliary drainage and cholangitis, the preoperative approach to patients with HCCA should be optimized to minimize the risk of cholangitis.

ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Safety and Efficacy of Total Percutaneous Access for Fenestrated Endovascular Aortic Aneurysm Repair (FEVAR)

Carlos H. Timaran, Tarik Ali, Martyn Knowles, David E. Timaran, Shadman Baig
University of Texas Southwestern Medical Center

Background: Percutaneous femoral vascular access is frequently used for aortic endovascular procedures, with a local access complication rate of 5-16%. Recently, FEVAR has emerged as a new technique for the repair of short-neck and juxtarenal complex abdominal aortic aneurysms. The safety and efficacy of percutaneous access for FEVAR has not been investigated to date.

Patients and Methods: Percutaneous femoral access is frequently used for aortic endovascular procedures, with a local access complication rate of 5-16%. Recently, FEVAR has emerged as a new technique for the repair of complex abdominal aortic aneurysms. The safety and efficacy of percutaneous access for FEVAR has not been investigated.

Results: The total number of femoral access sites was 78 (74 percutaneous, 4 open). The median femoral access size was 20F (IQR:19-20) for percutaneous and 20F(IQR:18-21) for open access. Median operative time was 220 (IQR:180-290) minutes. 9 patients had a history of previous aortic surgery, and 8 had a history of previous groin surgery. Three conduits were performed: 2 endoconduits and 1 open. The percutaneous access success rate was 91.9%. There were 5 groin access site complications: 2 in the open group (2/4;50%) and 3 in the percutaneous group (3/74;4.1%)($P=0.0003$). The 2 open complications were a wound infection of a retroperitoneal conduit incision requiring drainage, and a wound infection with lymph leak. The 3 percutaneous complications included a tear and bleeding, a backwall injury and flap, and an embolization requiring thrombectomy and fasciotomy. Previous aortic or groin surgery did not increase the risk of access site complications. The mean operative time in the complication group was 316 ± 36 compared to 217 ± 10 minutes in those without complication ($P=0.0027$).

Conclusion: Percutaneous femoral access is a safe and effective alternative to open access for FEVAR. Operative time is significantly increased when access site complications occur.

ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Predictors of Safety and Efficacy of Two Stage Hepatectomy for Bilateral Colorectal Liver Metastases

Guillaume Passot, Thomas Aloia, Daria Zorzi, Claudius Conrad, Kristoffer Brudvik, Jean-Nicolas Vauthey

UT MD Anderson Cancer Center

Background: Two-stage hepatectomy (2SH) is a strategy to increase resectability in patients with bilateral colorectal liver metastases (BCLM) requiring resection of a large liver volume and remains the standard surgical intention-to-treat approach in such patients. However, the predictors of safety and efficacy of 2SH remain unclear.

Hypothesis: To determine factors associated with safety and efficacy of 2SH in a large series of patients with BCLM.

Design: Retrospective review of prospectively maintained database of patients with CLM.

Setting: Tertiary Care Center.

Patients and Methods: From 2003 to 2014, a total of 1502 underwent liver resection; 109 consecutive patients with planned 2SH were included in this study. Factors associated with major complication and survival were determined using multivariate analysis. Survival analysis was performed in intention-to-treat, including patients who did not undergo the second stage.

Results: Of 109 patients, 89 (82%) completed the second stage (SS). Reasons of dropout after first stage (FS) were disease progression (n=12), insufficient liver growth (n=5), and complications after surgery or portal vein embolization (n=3). More than 6 cycles of preoperative chemotherapy was associated with failure to proceed to SS (p=0.002). Major complication (FS: 5.5% vs. SS: 25.8%; p<0.001) and 90 days mortality (FS: 0% vs. SS: 7%; p=0.006) were higher after SS. Within the 2 stage, 28 complications occurred. Factors independently associated with major complications were rectal primary and more than 1 lesion resected in FS. At a median follow up of 29.5 months, median overall survival (OS) was 40.4 months. Three- and 5-year survival were significantly improved after 2SH completion vs non-completion (67% vs. 6% and 52% vs. 0% respectively, p<0.001). Factors independently associated with poor OS were rectal primary, *RAS* mutation, need of chemotherapy after first stage, and hepatic insufficiency (bilirubin >7 mg/dl) after SS. Factors independently associated with poor disease free survival (DFS) were failure to complete second stage and *RAS* mutation.

Conclusion: In the current study, *RAS* mutation was independently associated with poor OS, and poor DFS in patients who underwent 2SH. Further studies should aim to determine the predictive value of *RAS* mutation to assess patients with BCLM.

ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Who Will Be Able to Perform Open Biliary Surgery in 2025?

Kenneth R. Sirinek, Kent R. Van Sickle, Wayne Schwesinger
University of Texas San Antonio

Background: Although laparoscopic cholecystectomy (LC) has been the gold standard for 25 years, some patients still require an initial open cholecystectomy (OC) or conversion to OC.

Hypothesis: In this era of laparoscopic cholecystectomy, is there enough clinical experience with the open procedure to adequately train general surgery residents with this procedure?

Patients and Methods: Data from all patients undergoing a cholecystectomy during three decades: 1) 1981-1990, pre-laparoscopic era, 2) 1991-2001, first 10 years of LC, and 3) 2004-2013, recent 10 years of LC. Data were prospectively collected and retrospectively reviewed and analyzed by Chi-Square or Fisher's Exact Test.

Results: Compared to the pre-laparoscopic decade, the number of patients undergoing an OC decreased 67% (4086 vs 1322*) during the first decade of LC, and by 92% (4086 vs 307**) for the most recent decade. (Table) As a result, the number of OC's performed per graduating chief resident decreased dramatically for both laparoscopic decades compared to the pre-laparoscopic decade (70 vs 22 vs 4). Of 7734 patients undergoing a cholecystectomy in the last decade, 683 (8.8%) also underwent an intraoperative cholangiogram (IOC), and 36 (0.5%) a common bile duct exploration (CBDE). These procedures were divided among 85 chief residents.

Conclusion: There has been a concurrent and significant decline in the number of open cholecystectomies, IOC's and CBDE's available to our trainees. New training paradigms should include renewed focus on performing an IOC and/or CBDE as clinically indicated during LC; high quality simulation programs for OC, IOC, and CBDE; and the availability of an advanced video library depicting complicated open biliary operations.

Decade	Period	Total # (LC + OC)	# LC OC	# Initial OC's	# Total OC's	# Chief Residents	# OC's/Chief Resident (5yrs)
First	1981-1990	4086	-	4086	4086	58	70
Second	3/1991-6/2001	6896*	310	1012*	1322*	59	22*
Third	2004-2013	7734**	167+	140**+	307**+	85	4**+
	Total	18716	477	5238	5714	202	28
*P<0.001 second decade vs first decade, **P<0.001 third decade vs first decade, +P<0.01 third decade vs second decade							

ABSTRACTS CONTINUED

SECOND SCIENTIFIC SESSION | Monday, November 9, 2015 | 8:00am – 10:20am

Outcomes of Combined Partial Hepatectomy and Cyst Fenestration for Massive Polycystic Liver Disease

Fouad T. Chebib, Amber J. Harmon, Maria V. Irazabal, Yeonsoon Jung, Marie C. Hogan, Patrick S. Kamath, Vicente E. Torres, David M. Nagorney
Mayo Clinic Rochester

Abstract: Background: Severe Polycystic Liver Disease (PLD) is associated with progressive functional impairment and mortality. Partial hepatectomy and cyst fenestration (PHCF) selectively provides clinical benefit in highly symptomatic patients with massive hepatomegaly and preservation of at least one liver sector with patent sectoral vasculature.

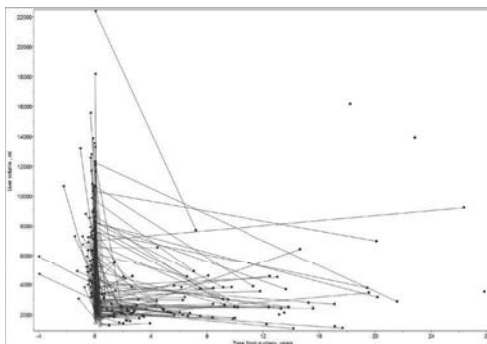
Objective: Ascertain whether the reduction in liver volume achieved by PHCF is sustained long-term.

Methods: Demographics and clinical data were retrieved from the electronic records in all PLD patients who underwent PHCF between July, 1985 and April, 2014. Preoperative Liver volumes (LV1), postoperative (< 6 months, LV2) and late follow up (> 1 year, LV3) were measured from axial or coronal MR or CT images.

Results: Among 186 patients who underwent PHCF, 91% were Caucasian women with ADPKD with a mean age of 49 years (\pm 9.6). Major peri-operative (\leq 30 days) complications (Clavien III/IV) occurred in 24% of the patients. Operative mortality (\leq 90 days) was 2.7% with only one death from liver failure. Overall survival was 95%, 90%, 76.5% and 59% at 1, 5, 10 and 15 years respectively. Only 4 of 32 late deaths were liver-related. Four patients underwent liver transplant at 1.1, 1.6, 7.7 and 52 months post resection.

Imaging records for volumetry were incomplete or unavailable in 37 patients. Of the remaining 149 patients, 30 patients had imaging for one LV, 65 for two LV and 54 for all three LV. Baseline characteristics and outcomes of all groups were similar regardless of imaging availability. Median LV was 6812 ml preoperatively and 2502 ml after PHCF leading to a median postoperative liver volume reduction of 61%. At follow-up (mean 7.8 years), median LV was 2500 ml. Interestingly, 29 out of 61 patients with available LV2 and LV3 showed further regression in LV upon follow up (median -14.8%); while the rest showed mild growth of 9.5%. Multivariate analysis of clinicopathologic factors failed to identify predictors of postoperative liver growth. Overall volumetric comparison of preoperative to follow-up liver imaging showed sustained liver volume reduction (median 60%). There was no difference in liver volumes or reduction rates among the patients who had one of the three images unavailable.

Conclusion: Sustained long-term reductions in LV after PHCF can be achieved in selected patients with severe, highly symptomatic PLD. In our experience, liver-related death and subsequent liver transplantation are infrequent after PHCF.



ABSTRACTS CONTINUED

THIRD SCIENTIFIC SESSION | Monday, November 9, 2015 | 10:30am – 4:15pm

Improving Mortality in Trauma Laparotomy through the Evolution of Damage Control Resuscitation: Analysis of 1,030 Consecutive Trauma Laparotomies

Bellal Joseph, Bardiya Zangbar, Tahereh Orouji Jokar, Narong Kulvatunyoo, Terence O’Keeffe, Andrew Tang, Rifat Latifi, Lynn Gries, Gary Vercruysse, Randall S. Frieese, Peter Rhee
University of Arizona

Background: The aim of this study was to evaluate the related change in outcomes (mortality, complications) in patients undergoing TL with implementation of damage control resuscitation (DCR).

Hypothesis: Implementation of DCR in patients undergoing TL is associated with better outcomes.

Design: A retrospective analysis

Setting: Level 1 trauma center

Patients and Methods: We analyzed 1030 consecutive patients with TL. Patients were stratified into 3 phases: Pre-DCR (2006-2007), transient (2008-2009), and post-DCR (2010-2013). Resuscitation fluids (crystalloids and blood products), injury severity score (ISS), vital signs, and laboratory (Hemoglobin, INR, lactate) parameters were recorded. Regression analysis was performed after adjusting for age, ISS, laboratory and vital parameters, co-morbidities, and resuscitation fluids to identify independent predictors for outcomes in each phase.

Results: Patient demographics and ISS remained same through the three phases. There was a significant reduction in volume of crystalloid ($p=0.001$) and a concomitant increase in the blood product resuscitation ($p=0.04$) in the post-DCR phase compared to pre and transient-DCR phases. Volume of crystalloid resuscitation was an independent predictor of mortality in the pre-DCR (OR [95% CI]: 1.071[1.03-1.1], $p=0.01$) and the transient (OR[95% CI]:1.05[1.01-1.14], $p=0.01$) phase however, it was not associated with mortality in the post-DCR phase (OR[95% CI]:1.01[0.96-1.09], $p=0.1$). Coagulopathy ($p=0.01$) and acidosis ($p=0.02$) were independently associated with mortality in all three phases.

Conclusion: Implementation of DCR was associated with improved outcome in patients undergoing TL. There was a decrease in the use of damage control laparotomy with decrease in use of crystalloid and increase in use of blood products.

Variables	Pre-DCR n=265	Transient n=261	Post-DCR n=504	<i>p</i>
DCL use	33.6%	10.3%	9.1%	0.001
Crystalloids (L)	11.8±9.0	6.8±4.3	6.2±4.5	0.001
Blood products(L)	4.1±3.8	4.8±3.7	6±5.8	0.04
Complications	38%	20%	19%	0.001
Mortality	17%	10%	11%	0.001

ABSTRACTS CONTINUED

THIRD SCIENTIFIC SESSION | Monday, November 9, 2015 | 10:30am – 4:15pm

Cost-Effectiveness of Free Colonoscopies in an Uninsured Population Enriched for Colorectal Cancer

Erica Sutton, Charles W Kimbrough, Whitney F. Jones, Nikhil Borkhetaria,
Brad S. Sutton
University of Louisville

Background: A large number of uninsured patients have little access to screening colonoscopy, and subsequently present with advanced stages of colorectal cancer (CRC) that beget worse outcomes and higher total costs.

Hypothesis: Providing *pro bono* colonoscopies to uninsured patients at high-risk for CRC successfully detects early stage disease and is cost-effective.

Design: Prospective case series with a historical control

Setting: Non-profit organization partnered with community health clinics

Patients and Methods: Patients considered at increased risk for CRC (criteria included a positive family history, a history of inflammatory bowel disease, suggestive symptoms, or a positive noninvasive screening test) were offered free screening colonoscopies. Patient data from these colonoscopies was collected over a 12-month period, and the incidence of CRC within our cohort was compared to a control group of uninsured patients from the Surveillance, Epidemiology, and End Results (SEER) registry. To understand the economic impact of *pro bono* colonoscopies, we used published estimates derived from SEER-Medicare data of health expenditures by CRC stage to develop a cost model. To compare overall costs between our cohort and the SEER control, the average initial cost of care (up to one year) was weighted by the stage-specific CRC incidence in each group. All values were discounted to 2015 US dollars.

Results: During the study period, 682 uninsured patients were screened, with 9 cancers identified. Overall, the incidence of CRC in our cohort was 1.3%. Three patients were found to have stage I tumors, two patients were stage II, three were stage III, and one patient had Stage 0 (in-situ) disease. The total cost of initial treatment of stage 0 CRC was estimated at \$19,432, while the cost of initial treatment for stage I-III was \$29,746, \$46,623, and \$50,449.29, respectively. Multiplying the number of patients found to have each stage of CRC by these respective costs $[(1 \times \$19,431) + (3 \times \$29,746) + (2 \times \$46,623) + (3 \times \$50,449)]$, a total cost of \$353,262 was estimated to be incurred during the initial phase of care. Compared to the SEER control, our cohort included more early stage cancers, and subsequently had a lower per patient initial cost (\$39,257 vs \$45,827, a 16% decrease).

Conclusion: While the national incidence of CRC remains approximately 0.05%, our screening criteria successfully identified a high-risk population with an overall 1.3% incidence of CRC. For these patients, the provision of free screening colonoscopies not only identifies earlier stage tumors, but may decrease overall health care costs.

ABSTRACTS CONTINUED

THIRD SCIENTIFIC SESSION | Monday, November 9, 2015 | 10:30am – 4:15pm

Comparison of Multi-Detector Computed Tomography (MDCT) and Endoscopic Ultrasound (EUS) in Assessment of Portal-Mesenteric Venous Involvement (PMV) in Patients with Localized Pancreatic Ductal Adenocarcinoma (PDAC)

Flavio G. Rocha, Jesse Clanton, Stephen Oh, Emily Johnson, Stephen Kaplan, Adnan Alseidi, Thomas Biehl, Scott Helton, Vincent Picozzi, Russell Dorer, David Coy, Andrew Ross, Richard Kozarek
Virginia Mason Medical Center

Background: MDCT and EUS are often utilized in the staging of PDAC to determine resectability. Patients with suspected PMV are typically offered neoadjuvant chemotherapy (NAC) prior to pancreaticoduodenectomy (PD) while those without PMV proceed directly to resection.

Hypothesis: We sought to compare the effectiveness of MDCT and EUS in determining PMV in PDAC patients undergoing PD.

Design: Retrospective review.

Setting: High volume pancreatic surgery tertiary referral hospital.

Patients and Methods: All patients with resected PDAC who had both staging MDCT and EUS at our institution between 2003 and 2014 were included. Independent re-review of PMV by a staff radiologist was correlated to need for venous resection during PD and true venous invasion on pathologic re-review of resected specimens. Sensitivity, specificity, positive and negative predictive values were calculated for MDCT and EUS in patients selected for upfront resection and those who received NAC prior to PD.

Results: Venous resection and vein invasion was seen in 18/60 (30%) and 8/60 (13%) of upfront resectable patients and in 26/49 (51%) and 8/49 (16%) of patients resected following NAC. The predictive capacity of MDCT and EUS is summarized in the Table below. Both MDCT and EUS had an equally poor sensitivity but high specificity for detecting venous resection and vein invasion in upfront resectable patients. Conversely, in patients selected for NAC, both MDCT and EUS had equally high sensitivity but poor specificity for venous resection and vein invasion.

Conclusions: Preoperative imaging assessment of PMV by MDCT and EUS in PDAC have similar efficacy but different predictive capacity in determining need for venous resection and

pathologic vein invasion depending on whether patients are resected upfront or received NAC. This may due to inherent limitations of the technology versus a true downstaging effect of NAC.

Upfront Resection (n=60)		Sensitivity	Specificity	PPV	NPV
Venous resection	CT	44.4 (21.3-69.2)	81.0 (65.9-91.4)	50.0 (24.7-75.3)	77.3 (62.2-88.5)
	EUS	23.5 (6.8-49.9)	94.7 (82.3-99.4)	66.7 (22.3-95.7)	73.5 (58.9-85.1)
Vein invasion	CT	37.5 (8.5-75.5)	75.0 (61.1-86.0)	18.8 (4.0-45.6)	88.6 (75.4-96.2)
	EUS	14.3 (0.4-57.9)	89.6 (77.3-96.5)	16.7 (0.4-64.1)	87.8 (75.2-95.4)
Neoadjuvant Chemotherapy (n=49)		Sensitivity	Specificity	PPV	NPV
Venous resection	Pre-CT	92.3 (74.9-99.1)	39.1 (19.7-61.5)	63.2 (46.0-78.2)	81.8 (48.2-97.7)
	Post-CT	84.6 (65.1-95.6)	56.5 (34.5-76.8)	68.8 (50.0-83.9)	76.5 (50.1-93.2)
	EUS	84.0 (63.9-95.5)	43.5 (23.2-65.5)	61.8 (43.6-77.8)	71.4 (41.9-91.6)
	EUS		26.8 (14.2-42.9)	21.1 (9.6-37.3)	100 (71.5-100)
Vein invasion	Pre-CT	100 (63.1-100)	41.5 (26.3-57.9)	25.0 (11.5-43.4)	100 (80.5-100)
	Post-CT	100 (63.1-100)	32.5 (18.6-49.1)	20.6 (8.7-37.9)	100 (80.5-100)

ABSTRACTS CONTINUED

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

Prognostic Utility of Immunoprofiling in Colon Cancer: A Prospective, Multicenter Trial

Devin C. Flaherty, Simon Lavotshkin, John R. Jalas, Hitoie Torisu-Itakura, Daniel D. Kirchoff, Myung S. Sim, Delphine J. Lee, Anton J. Bilchik

John Wayne Cancer Institute

Background: Retrospective data indicate that immunoprofiling of T-cell markers may be associated with outcome in colon cancer.

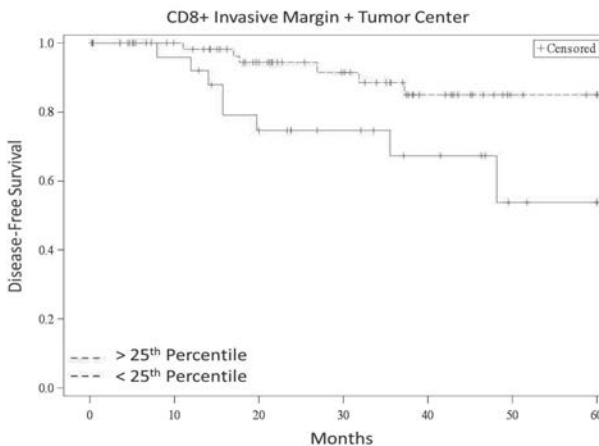
Hypothesis: Prospective T-cell immunoprofiling is prognostically accurate when colon cancer is staged with surgical/pathologic quality measures.

Design and Setting: A prospective cohort was selected from patients enrolled in an ongoing phase II multicenter trial of nodal ultrastaging for colon cancer.

Patients and Methods: Primary colon cancer specimens from 99 patients were analyzed by immunohistochemistry for CD3⁺ (total T cells), CD4⁺ (helper T cells), CD8⁺ (cytotoxic T cells) and FOXP3⁺ (regulatory T cells). The lymphocyte populations were quantified with digital image analysis; results were examined for their association with 5-year disease-free survival along with tumor-node-metastasis stage, and clinicopathologic variables.

Results: Longer disease-free survival was significantly associated with higher CD8⁺ counts ($P = 0.016$, figure), lower CD4⁺/CD8⁺ ratios ($P=0.029$), and higher CD8⁺/FoxP3⁺ ratios ($P = 0.039$, invasive margin with median cut). In multivariable Cox proportional hazard analysis, only CD8⁺ counts ($P = 0.002$) and number of tumor-positive lymph nodes ($P < 0.001$) remained significant.

Conclusion: This is the first prospective demonstration of the prognostic utility of immunoprofiling in colon cancer staged by surgical and pathological quality measures. Staging based on tumor immunoprofile may be independent of tumor-node-metastasis staging and might provide targets for specific immunotherapies.



FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

Vulnerable Hospitals and Cancer Surgery Readmissions: Insights into the Unintended Consequences of the Patient Protection and Affordable Care Act (PPACA)

Young Hong, Chaoyi Zheng, Elizabeth Hechenbleikner, Lynt B. Johnson, Nawar Shara, Waddah B. Al-Refaie
MedStar Georgetown University Hospital

Background: As a provision of the PPACA, hospitals will be penalized for higher than benchmark readmissions. However, emerging evidence suggest such penalties will push already financially strained hospitals into further hardship. To assess this important gap, we sought to describe the relationship between vulnerable hospital types, defined here as Safety Net Hospitals (SNH) or High Medicaid Hospitals (HMH), and readmission patterns after major cancer surgery.

Hypothesis: Vulnerable hospitals have higher readmission rates after major cancer surgery than non-vulnerable hospitals.

Design: Large, racially diverse population observational cohort study

Setting: We analyzed 110,857 patients in 355 hospitals in the 2004-2011 State Inpatient Database of California linked to the Annual Survey Database of American Hospital Association who underwent resections of lung, esophageal, gastric, pancreatic, hepatobiliary, rectal, and kidney cancer.

Patients and Methods: SNH were identified by the California Association of Public Hospitals and Health Systems. HMH were defined as hospitals with highest decile of Medicaid patients. Multiple logistic regression models were used to quantify association between vulnerable hospital types and readmission patterns, adjusting for covariates and in-hospital clustering.

Results: Vulnerable hospitals represented nearly 16% of 355 California hospitals (5.4% were SNH and 10.7% were HMH). SNH and HMH treated 2.4% and 8.6% of all patients in our study cohort, respectively. There was minimal overlap between the two vulnerable hospital types with 5 hospitals that were both HMH and SNH. Repeated regression analyses showed both hospital types predicted higher 30-day, 90-day, and repeated readmissions than non-vulnerable hospitals (Table).

Conclusion: This large diverse multi-hospital appraisal showed that vulnerable hospitals experience worse readmission patterns after major cancer surgery compared to non-vulnerable hospitals. These findings validate current concerns about unintended consequences of PPACA penalties on financially strained hospitals. Our results have policy implications for amendments of penalties by PPACA to vulnerable hospitals given diminishing reimbursements.

Vulnerable Hospital Type	30-Day Readmissions	90-Day Readmissions	Repeated Readmissions ^a
	Odds Ratio (95% CI)		
Safety Net v.s. Non-Safety Net Hospital ^a	1.29 (1.17-1.42)	1.24 (1.14-1.35)	1.30 (1.15-1.47)
High Medicaid v.s. Low Medicaid Hospital ^a	1.12 (1.00-1.25)	1.26 (1.15-1.39)	1.28 (1.05-1.55)

^aAfter adjusting for age, sex, comorbidity, type of procedure and year of admission.

^bDefined as ≥1 readmission within 60 days from first readmission.

ABSTRACTS CONTINUED

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

Laparoscopic Totally Extraperitoneal Inguinal Hernia Repair Improves Quality of Life at Two-Years Follow-up

Matthew Gitelis, Francis DeAsis, John Linn, Woody Denham, Stephen Haggerty, JoAnn Carbray, Ray Joehl, Tomokazu Kishiki, Michael Ujiki
NorthShore University HealthSystem

Background: The lack of long-term data on quality of life after inguinal hernia repair presents a challenge in setting patients' post-op expectations. This study aimed to describe quality of life outcomes after laparoscopic totally extraperitoneal (TEP) inguinal hernia repair with a minimum of two-years follow-up.

Hypothesis: TEP significantly improves quality of life at 2 yrs post-op.

Design: Prospective cohort study

Setting: General Surgery Service, University teaching hospital

Patients and Methods: We prospectively evaluated 267 patients who had TEP inguinal hernia repair in an IRB-approved study. Short form-36 (SF36), Surgical Outcomes Measurement System (SOMS), and Carolinas Comfort Scale (CCS) were administered pre- and post-operatively. Pairwise comparisons using nonparametric Wilcoxon signed rank test were made between time points.

Results: Mean patient age was 55.9 ± 15.4 (yrs \pm SD) and 92% were male; 80% of patients presented with painful hernias and 15% of hernias were recurrent. Mean operative time was 42.1 ± 17.5 (mean \pm SD); no operative complications occurred. Mean duration of narcotic pain medication usage was 2.5 ± 3.4 (days \pm SD), and daily activities were resumed and return to work occurred 5.4 ± 4.4 and 5.4 ± 3.9 days post-op, respectively. Recurrence rate was 2%. SF36 outcomes improved from baseline for domains of Physical Functioning, Role Limitations due to Physical Health, and Pain at 2 yrs post-op; SOMS outcomes improved for domains of Pain Impact on Quality of Life, Body Image, and Patient Satisfaction ($p \leq 0.05$). The percentage of patients reporting no or mild but not bothersome symptoms on the CCS at 2 yrs post-op for sensation of mesh, pain, and movement limitations were 99%, 95%, and 97%, respectively.

Conclusion: Measuring both general and procedure-specific quality of life, patients' perceptions of health status significantly improved 2 yrs after laparoscopic TEP inguinal hernia repair.

ABSTRACTS CONTINUED

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

A Systematic Review of the Mucosa-Associated Lymphoid Tissue (MALT) Variant of Primary Rectal Lymphoma: Is There an Optimal Treatment?

Melissa M. Felinski, Lala R. Hussain, Scott R. Kelley

Tri-Health Good Samaritan Hospital

Background: While comprising less than 1% of all gastrointestinal lymphomas, primary rectal lymphoma (PRL) remains the third most common cause of rectal cancer after adenocarcinoma (90-95%) and carcinoid (5%). The most common type of PRL is the mucosa associated lymphoid tissue (MALT) variant. It has been postulated that *Helicobacter pylori* (*H. pylori*) may be a causative agent responsible for the development of MALT PRL. Small studies have shown remission with a plethora of treatments including radiotherapy, chemotherapy, surgery, *H. pylori* eradication (HPE), and combination of modalities. To date no study has been able to recommend a definitive approach for treatment.

Objective: The objective of our study was to systematically review the literature in an attempt to define an optimal treatment for the MALT variant of PRL.

Design: A systematic review of the English literature was conducted to identify articles describing the MALT variant of PRL. Articles were excluded if they did not meet Dawson's criteria for primary intestinal lymphoma. A retrospective review was also performed at our institution.

Setting: Independent academic center in Cincinnati, Ohio

Patients: Patients were included if they met the Dawson diagnostic criteria at initial presentation: (1) biopsy-proven MALT lymphoma confined to the rectal region, (2) no palpable superficial or mediastinal lymphadenopathy, (3) no radiological evidence of nodal involvement beyond the rectal region, and (4) no involvement of the liver and spleen.

Results: The review included 53 cases from the literature and 8 cases from our institution. Of these, only 32 cases were tested for *H. pylori*. A complete response was achieved in 14 of 22 patients treated exclusively with HPE therapy, including 6 patients who were *H. pylori* negative. The 8 patients who failed HPE therapy were provided a second treatment modality; complete remission was achieved in 1 patient following chemotherapy, 3 patients following radiation therapy, and 1 patient following surgical resection. Therapeutic outcomes were not described in 3 additional cases that received chemotherapy after HPE. In other first line treatment, complete response was observed in 5 of the 6 patients with radiation therapy, 2 of the 3 patients with chemotherapy, 3 of the 7 patients with endoscopic resection, and 6 of the 8 patients with surgical resection. Patients who failed first line therapies were responsive to various second line treatments. Two patients spontaneously regressed with observation alone.

Conclusion: Complete remission of primary rectal MALT lymphoma was achieved using various therapeutic strategies, with HPE being the most common. However, due to insufficient documentation and lack of uniformity in published cases, a critical evaluation of the literature to determine an optimal treatment for the MALT variant of PRL is difficult. A reporting system needs to be devised consisting of clinically meaningful and long-term follow-up data to formulate a treatment algorithm for this rare disease.

ABSTRACTS CONTINUED

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

Inpatient Rehabilitation Following Liver Transplantation Decreases Risk and Severity of 30-Day Readmissions

Anai N. Kothari, Ryan M. Yau, Robert H. Blackwell, Talar Markossian, Matthew A.C. Zapf, Amy D. Lu, Paul C. Kuo
Loyola University

Background: Discharge location is associated with short-term readmission rates following hospitalization for several medical and surgical diagnoses.

Hypothesis: We hypothesized that discharge location: home, home health, skilled nursing facility (SNF), long-term acute care (LTAC), or inpatient rehabilitation independently predicted the risk of 30-day readmission and severity of first readmission following orthotopic liver transplant (OLT).

Design and setting: Retrospective cohort review using Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases for Florida and California.

Patients and Methods: Patients who underwent OLT from 2009 to 2011 were included and followed for 1 year. Public UNOS data were used to verify the number of OLTs performed in each state and validate the inclusion criteria. Mixed-effects logistic regression was used to model the effect of discharge location on 30-day readmission controlling for demographic, socioeconomic, and clinical factors. Total cost of first readmission was used as a surrogate measure for readmission severity and resource utilization.

Results: A total of 3,072 patients met our inclusion criteria. Overall 30-day readmission rate was 29.6%. Readmission rates by location of discharge are shown in the Table. Discharge to inpatient rehabilitation (aOR=0.43, p=0.011) decreased the odds of 30-day readmission when compared to home. The time to first readmission was longest for patients discharged to inpatient rehabilitation (17 days vs 8 days, p<0.001). Cost and reason for first readmission were assessed for each initial location of discharge (Table).

Conclusion: When compared to other locations of discharge, inpatient rehabilitation reduces the risk of 30-day readmission and increases the time to first readmission. These benefits come without increasing the severity of readmission. Increased utilization of inpatient rehabilitation following OLT can improve 30-day readmission rates.

Table.

Discharge Location	Home	Home Health	Inpatient Rehabilitation	SNF/LTAC
30-day Readmission (%)	30.3%	32.7%	17.1%	27.5%
Time to First Readmit (median days, IQR)	8 (3-16)	8 (4-15)	17 (10.5-21)	8 (6-17)
Total Costs of All 30-day Readmissions (median \$, IQR)	\$12,424.24 (\$6,524.93 – 25,929.96)	\$12,959.45 (\$6,353.88 – 28,967.34)	\$14,629.20 (\$11,126.03 – 72,138.54)	\$25,535.94 (\$6,793.57 – 53,165.93)
Top 3 Reasons for First Readmission: (1: Cause, %)	Infectious (25.5%)	Infectious (22.7%)	Infectious (33.3%)	Infectious (22.6%)
(2: Cause, %)	Electrolyte (14.0%)	Gastrointestinal (12.8%)	Electrolyte (16.7%)	Hematologic (17.0%)
(3: Cause, %)	Gastrointestinal (13.0%)	Electrolyte (12.4%)	Gastrointestinal (16.7%)	Electrolyte (13.2%)

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

Limited Patency of Covered Stents Placed for Traumatic Axillo-Subclavian Artery Injury

Atish Chopra, J. Greg Modrall, Martyn Knowles, Herb A. Phelan, R. James Valentine, Jayer Chung
University of Texas Southwestern Medical Center

Background: Traumatic axillo-subclavian artery injuries (ASAI) are uncommon but devastating. Covered stent use for ASAI has been popularized; however, there is conflicting evidence within the literature regarding the durability and appropriate use of covered stents in ASAI. We reviewed current national management trends as well as an institutional experience of emergent covered stent placement outcomes for ASAI.

Study Design: A retrospective review of National Trauma Data Bank (NTDB) from 2010-2012 for national epidemiologic data of ASAI was performed. International classification of diseases and procedure codes were used to isolate ASAI and therapy type. Additionally, a single-center, retrospective review of consecutive patients with ASAI from Jan 2010-Aug 2014 was performed. The Kaplan-Meier method was utilized to describe stent patency. Continuous and categorical variables were described utilizing the median, frequencies, and percentages where appropriate.

Results: Review of the NTDB revealed 520 patients having ASAI rendering an incidence of 0.1%. Endovascular therapy was used in 76 patients (14.7%) vs. open therapy in 280 patients (53.8%). Non-operative or unclear treatment modality was used in 164 (31.5%). Utilization of endovascular interventions increased from 11.3% to 17.2% ($p < 0.05$). Endovascular therapy was more frequently used in blunt vs. penetrating trauma (59.2% vs. 40.8%, $p < 0.005$). Institutional review revealed 10 patients with ASAI treated with endovascular therapy. All underwent successful endovascular covered stent placement. Stent thrombosis occurred in 30% at a median of 132 (30-223) days (Fig 1). Subsequent open bypass was performed in 3 patients with 7 patients (70%) lost to follow up.

Conclusions: Covered stents can temporize ASAI and are being increasingly utilized nationwide. Covered stents are not a durable option, however. As 70% of subjects fail to comply with follow up, early open bypass at initial hospitalization may reduce the number of patients with ischemic upper extremities.

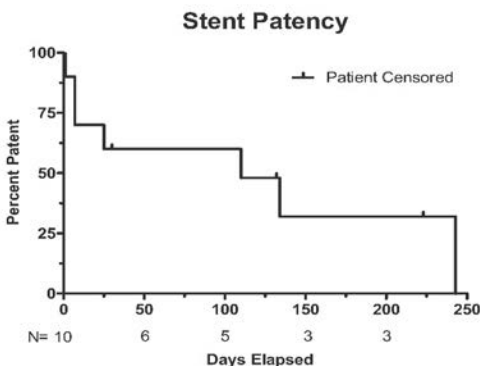


Figure 1. Kaplan-Meier curve for primary covered stent patency of axillosubclavian artery injuries.

ABSTRACTS CONTINUED

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

Clinical Factors Can Predict Malignancy in Surgical Patients with Indeterminate Bethesda III and IV Thyroid Nodules

Josefina C. Farra, Danny Yakoub, Andrea R. Marcadis, Wei Zhao, Tulay Koru-Sengul, John I. Lew

University of Miami

Background: With implementation of the Bethesda System for Reporting Thyroid Cytopathology (BSRTC), indeterminate FNA results (Bethesda III and IV) remain a clinical dilemma for clinicians who must determine extent of surgical management. Certain everyday biochemical and imaging parameters used in the management of such thyroid nodules may be predictive of underlying thyroid malignancy. Such predictive factors in the clinical setting may assist surgeons in the treatment of Bethesda III/IV thyroid nodules.

Hypothesis: Combination of clinical parameters can be predictors of thyroid cancer for indeterminate Bethesda III/IV nodules.

Design: A retrospective review of prospectively collected data of patients from 04/2010 to 11/2014.

Setting: Single tertiary referral medical center

Patients and Methods: Patients who underwent FNA and thyroidectomy were included in the study. Only patients with a dominant thyroid nodule and initial indeterminate diagnosis (Bethesda III/IV) by FNA were analyzed. Final pathology results were reviewed, noting whether malignancy or benignity was found in the dominant thyroid nodule. Logistic regression models were fitted to identify significance of clinical features, preoperative TSH levels, imaging and FNA parameters to predict incidence of thyroid cancer.

Results: Of 595 study patients, 152 (25.5%) had Bethesda III/IV thyroid nodules by FNA. Of this subgroup, 67 patients (44.1%) had thyroid cancer on final pathology. An aggregated sum score was calculated that was based on age [<45 yrs. (code as 1) vs. ≥ 45 yrs. (code as 0)], gender [Female (1) vs. Male (0)], race [Non-Black (1) vs. Black (0)], preoperative TSH level [≥ 1 (1) vs. < 1 (0)], and ultrasound features such as echogenicity [Yes (1) vs. No (0)]. The higher the sum score, the higher risk of thyroid cancer in patients with Bethesda III/IV nodules (i.e. every one score increase in sum score corresponded to a 65% statistically significant increase in the odds of thyroid malignancy [odds ratio:1.65, 95%CI: 1.16-3.35, $P=0.006$]).

Conclusion: In patients with indeterminate Bethesda III/IV nodules, a sum score based on combination of age, gender, race, preoperative TSH and ultrasound features is significantly predictive of thyroid malignancy. These everyday clinical and biochemical parameters, therefore, can serve as a useful adjunct to FNA in helping surgeons determine the extent of surgical treatment in these patients.

ABSTRACTS CONTINUED

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

The Effect of Resident Involvement on Patient Outcomes in Complex Laparoscopic Surgery

Matthew Whealon, Monica T. Young, Michael J. Phelan, Ninh T. Nguyen
University of California, Irvine

Background: Recent studies have examined the impact of resident involvement on patient outcomes in minimally invasive surgery. Historically resident participation has not been shown to be associated with inferior patient outcomes; however, this has been called into question for complex laparoscopic procedures.

Hypothesis: Resident involvement does not impact risk-adjusted outcomes after complex minimally invasive operations.

Design: Retrospective cohort study between 2002 and 2010

Setting: Hospital participating in the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP) database.

Patients and Methods: The ACS NSQIP database was reviewed for patients undergoing laparoscopic colectomy and laparoscopic antireflux procedures. Data was analyzed based on operations performed with a resident involved compared to those performed by an attending with no resident present. Primary endpoints were risk-adjusted 30-day mortality and serious morbidity. Secondary endpoints were operative time, hospital length of stay, and 30-day reoperation.

Results: A total of 31,736 cases were analyzed, 63.3% had a resident involved in the operation and 36.7% were performed by an attending without a resident present. Patients in the attending group compared to the resident group had a slightly higher mean age (60 vs. 59 years, $p<0.01$), mean body mass index (BMI; 30 vs. 29 kg/m², $p<0.01$), and mean comorbidity score (0.87 vs. 0.83 comorbidities, $p<0.01$). Operative time was significantly longer with resident involvement (162 vs. 138 minutes, $p<0.01$). There were no significant differences between attending and resident groups with regard to hospital length of stay (4.58 vs. 4.56 days), 30-day reoperation (3.25% vs. 3.05%), serious morbidity (6.04% vs. 6.07%) or 30-day mortality (0.59% vs. 0.46%). For cases with resident involvement compared to attending group, there was no significant difference in risk-adjusted outcome for 30-day reoperation (OR 0.93; 95%CI 0.81-1.06, $p=0.77$), serious morbidity (OR 1.03; 95%CI 0.94-1.14, $p=0.77$) or 30-day mortality (OR 0.83; 95%CI 0.60-1.15, $p=0.77$).

Conclusion: Resident involvement in complex laparoscopic procedures increases operative time without an impact on postoperative morbidity or mortality.

ABSTRACTS CONTINUED

FOURTH SCIENTIFIC SESSION | Tuesday, November 10, 2015 | 8:00am – 11:30am

Results of Simultaneous Liver-Kidney Transplant: A Single Center Review

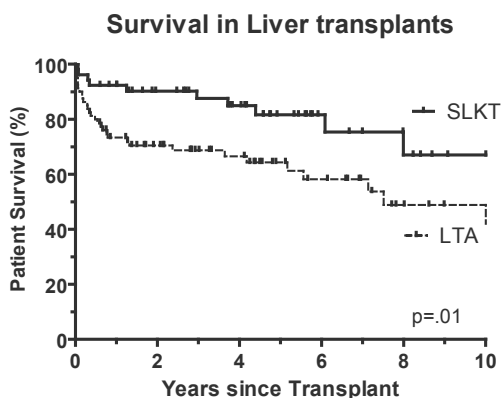
MB Majella Doyle, Erin Maynard, Neeta Vachharajani, Jason Wellen, Yiing Lin, Jeffrey Lowell, Surendra Shenoy, William Chapman
Washington University

Background: The decision to transplant a liver and a kidney into a patient with renal failure is fraught with controversy. The aim of this study was to compare simultaneous liver-kidney transplantation (SLKT) to liver transplant alone (LTA) in patients with renal failure.

Methods: A single center retrospective review comparing patients undergoing SLKT and LTA (on dialysis) between Jan 2000 and Dec 2014 was performed.

Results: Of 1129 liver transplants, 123 were on dialysis pre-transplant; 52 had SLKT (11 were pre-dialysis) and 80 recipients had LTA. Age, race, gender, pre-transplant diabetes and HTN were similar between the two groups. MELD and BMI were lower in the SLKT group ($p=0.001$). SLKT patients had better overall survival at 1, 5 and 10 years (92.3%, 81.6%, 67% vs. 73.3%, 64.3 %, 48.8% respectively $p<0.01$). Graft survival was also superior in patients undergoing SLKT at 1, 5 and 10 yr. vs. LTA (90.4%, 79.6%, 65.3% vs. 72.1%, 61.3%, 44.3% respectively $p<0.01$). 6/52(11.5%) recipients had final positive cross match but only 1/52(1.9%) kidney graft was lost to rejection. In the SLKT group 9/52 (17.3%) required dialysis post-transplant but only 2 remained dialysis dependent beyond 30 days. All patients in LTA group were on dialysis pre-transplant and significantly more patients (52/80(65%)) required dialysis post LTA ($p<0.0001$ vs. SLKT post-transplant dialysis) and 31/80 (38.8%) were dialysis dependent for more than 30 days or died on dialysis within 30 days. 2 LTA recipients were listed for kidney transplant. The number of deaths in the SLKT group was significantly less compared to the LTA group (10 vs. 31, $p=0.02$). LTA were more likely to be transfused, but hospital stay, ICU stay, rejection episodes and need for re-transplant were similar between the two groups.

Conclusion: Patients with end stage liver disease (ESLD) on dialysis who undergo liver transplant have significantly better survival when SLKT is performed. In properly selected patients SLKT is an appropriate utilization of a scarce resource. Better prognostic indicators to determine which patients will benefit from SLKT are still needed.



FUTURE MEETINGS

November 5 – 8, 2016

Lowes Coronado Bay Resort ~ Coronado ~ California

November 4 – 7, 2017

Montelucia Resort and Spa ~ Paradise Valley ~ Arizona



Bylaws

BYLAWS

ARTICLE I: Membership

SECTION 1. The ACTIVE MEMBERSHIP shall be limited to three hundred and fifty (350). The HONORARY MEMBERSHIP shall be limited to fifteen (15).

SECTION 2. ACTIVE MEMBERS. To be eligible for consideration for active membership, an individual shall be a graduate of an accredited medical school, shall have completed formal residency training, and shall have been established in his/her current practice locale for a minimum of two years. To be considered, the individual must be board certified in his or her specialty, have established an excellent reputation as a surgeon, and be a Fellow of the American College of Surgeons. The individual must be recommended by the Membership Committee of the Association and approved by at least three-fourths of the Executive Committee to be presented to the members of the Association. Nominees to be Active Membership shall be elected to membership by the favorable vote of three-fourths of the members voting by secret ballot at the Executive Session of the Annual Meeting. Membership shall not be denied because of race, creed, color, or sex. Desired qualifications include:

- a. Practice limited to a surgical specialty, to a career in academic surgery, or to a career in administrative surgical fields.
- b. Contributions to scientific literature and/or documented leadership activity in local, state, or regional medical and surgical organizations.
- c. Evidence of a sincere interest in making a professional contribution to the Association.

Under special circumstances, renowned surgeons not meeting the above requirements may be granted membership.

A nomination shall be initiated by a member sponsor who shall be responsible for obtaining the curriculum vitae of the nominee which is to be submitted on a form provided by the Secretary of the Association. The nomination shall be endorsed by two (2) members. The completed nomination form and letters of recommendation from the sponsor and endorsers must be received in the office of the Secretary by May 1 of the year in which the nominee is to be considered.

SECTION 3. The Secretary will solicit additional letters of comment on the nominees from members of the Association. Each completed nomination received by the Secretary shall be presented to the Chairman of the Membership Committee. The Membership Committee shall consider all nominations and make recommendations to the Executive Committee. A final list of nominees shall be prepared by the Executive Committee for presentation to the members at the Annual Business Meeting for approval and acceptance.

BYLAWS CONTINUED

SECTION 4. Upon notification by the Secretary of election to membership in the Association, the nominee must accept the election within three (3) months by payment of the initiation fee and the annual dues to the Treasurer of the Association. To become an Active member, the nominee shall be expected to attend the first Annual Meeting after election to be introduced to the Association and to receive the certification of membership. Should the nominee fail to attend the first subsequent meeting, the second Annual Meeting must be attended. If the nominee is unable to attend the second meeting, membership will not be conferred subject to action by the Executive Committee. Fees contingent on membership will not be refunded.

SECTION 5. Nominees who have not been recommended for active membership after three (3) consecutive years of consideration by the Membership Committee and the Executive Committee shall be withdrawn from consideration. This action shall not preclude subsequent nominations for membership after an interval of two (2) years.

SECTION 6. A Senior Membership shall be any active member who has reached the age of sixty (60) years, or has retired from the active practice of surgery. He/she may be recommended for Senior Membership for other acceptable reasons if so ordered by the Executive Committee. A Senior Member shall retain all rights and privileges of membership, but he/she shall be relieved of the rules of attendance. He/she shall pay dues and any assessments until the age of sixty-five (65) or upon retirement, whichever shall occur first.

SECTION 7. HONORARY MEMBERS may be selected from individuals of scientific eminence or from among those who have made unusual contributions to surgery. They shall be proposed to the Association by the Executive Committee and elected in the same manner as active members. They shall not be required to pay dues or fees nor shall they be privileged to vote or hold office.

SECTION 8. The resignation of a member in good standing submitted in writing may be accepted by the Executive Committee.

SECTION 9. Any Active Member who fails to attend three consecutive annual scientific meetings shall be notified of his/her absences by the Secretary. Written requests for excused absence will be considered by the Executive Committee. If the truant member fails to attend the next successive Annual Meeting, membership shall be forfeited unless for good and sufficient cause which the Executive Committee shall determine otherwise.

BYLAWS CONTINUED

SECTION 10. Any member may be expelled for unprofessional or unethical conduct by unanimous vote of the Executive Committee. This action requires confirmation by the Association at the next Executive Session. Charges shall be preferred in writing and signed by three (3) members before consideration by the Executive Committee. If the vote of the Executive Committee is not unanimous, the charges may be adopted by mutual consent of the members of the Executive Committee, or they may be presented by the Executive Committee to the Association in Executive Session.

A three-fourths vote of the members voting by secret ballot (Article VI, Section 2) at the Executive Session of the Annual Meeting shall be required for expulsion.

SECTION 11. An active member, temporarily residing outside the continental limits of the United States or Canada, may be placed on temporary inactive status if such request is presented in writing and approved by the Executive Committee. Temporary inactive status relieves the member of attendance requirements and dues payment. Such status shall be granted for a period no longer than three (3) years.

ARTICLE II: Duties of Executive Committee and Officers

SECTION 1. The EXECUTIVE COMMITTEE shall be the executive body of the Association and shall consider all the business and policies pertaining to the affairs of the Association. It shall make nominations for officers and fill vacancies arising among officers. It shall select the sites and dates for Annual Meetings and appoint the Chairman of the Committee on Local Arrangements. It shall recommend the amount of the dues for the consideration of the membership. It shall make recommendations for Active, Senior, Honorary and Temporary Inactive Membership and shall act upon resignations and forfeitures of membership as necessary. It shall consider and act upon charges of unprofessional conduct and charges against members for alleged offenses against the Constitution and Bylaws. It shall also submit, for the vote of the membership in Executive Session, its recommendation concerning expulsion of a member. It shall direct the conservation and investment of funds held by the Association.

A report of the Executive Committee shall be presented to the members during the Executive Session of the Association during each Annual Meeting. No decisions or recommendations of the Executive Committee shall be binding on the Association unless accepted by a three-fourths vote of the members voting in Executive Session at the Annual Meeting.

Meetings of the Executive Committee shall be held at the call of the Chairman of the Executive Committee. Seven members present shall constitute a quorum.

BYLAWS CONTINUED

The most immediate Past President of the Association in attendance shall be Chairman of the Executive Committee, and the Secretary of the Association shall be Secretary of the Executive Committee.

SECTION 2. The PRESIDENT shall preside at the meetings of the Association, preserve order, regulate debates, appoint committees not otherwise provided for, announce results of elections, perform all other duties appertaining to his office, ex-officio member of all committees. The President shall hold office for one (1) year. In the absence of the President, the order of succession to the Chair shall be the First Vice President, the Second Vice President and then the Senior Member of the Executive Committee present.

SECTION 3. The SECRETARY shall attend to the correspondence of the Association, shall notify officers and new Members of their election, and shall notify and instruct new members of the Program Committee, the Membership Committee, and of other specially designed committees. The Secretary shall keep minutes of the Executive Committees executive sessions. Such minutes shall be the property of the Association and shall be the Custodian of the Seal of the Association and shall, upon direction by the Executive Committee, affix it to papers and documents. Together with the President, the Secretary shall sign all official papers. The Secretary shall pass upon all bills for expenses to be paid by the Treasurer. The Secretary shall publish a list of all nominees presenting their age, address, surgical board certification status, College of Surgeons fellowship status, and the names of the sponsor and endorsing members. This information on the nominees will be mailed to the members of the Association with a request for comment on individual nominees at an appropriate interval before the meeting of the Membership Committee. The Secretary shall send invitations to guests invited to attend the Annual Meeting at the request of a member. The Secretary shall be custodian of the records of attendance of all meetings of the Association. The Secretary shall make an annual report to the Executive Committee and to the Membership at the Annual Executive Session of the Association. The Secretary shall be an ex-officio member of all committees.

SECTION 4. The TREASURER shall be the custodian of all the moneys of the Association and shall be responsible to the Executive Committee. The Treasurer shall keep full and accurate books of account, containing a record of all moneys received and expended, which books shall be the property of the Association and open to the inspection of the authorized officers at all reasonable times. The Treasurer shall collect initiation fees, dues and assessments, and shall report to the Executive Committee the names of those members in arrears. The Treasurer shall present an annual report of account for audit which shall be made a part of the report of the Executive Committee. The Treasurer shall cooperate with the Chairman of the Local Committee on arrangements regarding finance.

BYLAWS CONTINUED

SECTION 5. The Association shall have an official journal chosen by vote of the membership. The RECORDER will be the liaison between the Association and the editor of the official journal. The Recorder shall contact the corresponding authors of all scientific papers presented before the Association. Authors shall be instructed to forward manuscripts to the Editor of the official journal prior to presentation at the annual meeting. The Recorder shall be responsible for the Transactions of the Western Surgical Association, published in the Program Book. The Transactions includes a list of past presidents and meeting places; a list of J. Bradley Aust awardees; the previous year's scientific program; the previous year's Presidential Address; and a list of deaths and memorials. The Recorder will send one copy of the Transactions to the National Library of Congress to be kept in perpetuity. The Recorder shall maintain an up-to-date file of the membership.

SECTION 6. The RECORDER shall act as Historian for the organization and maintain and transfer appropriate archival material from the organization to the Library of Medicine.

SECTION 7. DISTRICT REPRESENTATIVES. There shall be four (4) District Representatives, one of whom shall be elected each year for a term of four (4) years. The tenure of office shall be staggered in order to facilitate continuity in committee activities. These representatives shall be elected to represent widely diverse geographical sections of membership. They shall represent the best interests of the entire Association to the membership of their general areas, and in turn shall represent the will and pleasure of the membership of their general geographical areas to the Executive Committee.

SECTION 8. The Association is represented on the American Board of Surgery. When requested by the Board, the Executive Committee shall submit the names of three (3) member nominees for each position to the membership for approval of an Annual Meeting. Upon approval the panel of nominees will be forwarded to the American Board of Surgery who will notify the Association of the nominees selected for this office.

SECTION 9. The Association is regularly represented on the Board of Governors of the American College of Surgeons by one (1) member. When required, the Executive Committee shall submit the names of three (3) nominees approved by the membership for this office.

SECTION 10. The Association is regularly represented on the Advisory Council on Surgery of the American College of Surgeons by one member. When requested, the Executive Committee shall submit the names of three (3) nominees approved by the membership of this office.

BYLAWS CONTINUED

ARTICLE III: Initiation Fee and Annual Dues

SECTION 1. Every active member on his/her election shall pay an initiation fee, thereby acknowledging and accepting the Constitution and Bylaws. The amount of the fee may be changed at any Annual Meeting on recommendation of the Executive Committee and approved by a majority of the membership of the Association at the Executive Session of the Annual Meeting.

SECTION 2. Annual dues of every active member shall be paid by May 1 of each calendar year. The amount of the dues may be changed at the Executive Session of the Association on recommendation of the Executive Committee and approval by the majority of the members present.

SECTION 3. Any member who fails to pay dues or assessments for one year shall be notified by the Treasurer in writing. If the member fails to pay the required dues within two (2) months thereafter, the membership will be forfeited. The Treasurer shall notify the Executive Committee of this forfeiture. Waiver of membership fees or assessments shall be the prerogative of the Executive Committee.

ARTICLE IV: Programs and Publications

SECTION 1. A balanced program for the Annual Scientific Meeting will be arranged by the Program Committee, a copy of which shall be distributed to the membership. Abstracts submitted for consideration to be included in the program shall represent original material which shall not have been submitted for publication previously.

SECTION 2. All papers read before the Association shall be presented by a member or sponsored guest. The sponsoring member or co-author member shall be responsible for the content and quality of presentation. An excuse not to do this will require permission of the President.

SECTION 3. The time allowed for presentation of papers shall be determined by the Program Committee. The manuscript must be completed for publication in accordance with the guidelines of the official journal of the Association, and must be submitted in a timely fashion in accordance with published guidelines of the Association.

SECTION 4. The Executive Committee shall have full power to omit from the published records any paper, in part or in whole, which may have been read before the Association.

BYLAWS CONTINUED

SECTION 5. The Executive Committee shall cooperate with the editorial board of the official journal of the association to obtain prompt publication of the scientific papers.

SECTION 6. The expense of publication of papers and costs in excess of that allowed by the publisher shall be subject to assessment against the author. All papers published in the official journal identified with the Western Surgical Association shall have been read before the Association.

ARTICLE V: Meetings

SECTION 1. The place and time of the Annual Meeting and the Chairman of the Committee on Local Arrangements shall be selected by the Executive Committee.

- a. The date and location of the next two (2) succeeding meetings shall be published in the program at the time of the Annual Meeting each year.
- b. After such publication, the selected place of the meeting may be changed only by unanimous vote of the Executive Committee.
- c. Members shall sign the permanent register of the Association as a record of their attendance.
- d. A special register shall be provided for guests.

SECTION 2. A special meeting of the Association may be called at any time by the President, with the concurrence of the Executive Committee, and it shall be his duty to do so upon receipt of a written petition signed by ten (10) percent of the members.

SECTION 3. A member may invite a Doctor of Medicine or other distinguished scientist to participate in the scientific and social functions of the Association. A member inviting a guest to the Annual Scientific Meeting should send the name to the Secretary at least one (1) month before the date of the Annual Meeting. The Secretary shall forward an official invitation to the guest. The invited guests attending the meeting will receive a program of the meeting at the time of their registration. The President may extend to guests the privilege of participating in the discussions. Each guest will be assessed a Registration Fee. A senior medical student or a resident in surgery from an accredited residency program may attend the scientific meetings without charge upon presentation of appropriate identification and certification at the time of registration.

BYLAWS CONTINUED

ARTICLE VI: Quorum

SECTION 1. A minimum of twenty-five (25) percent of the membership shall be required at any Executive Session to form a quorum for transaction of the ordinary business of the Association, for elections, for changes in the Constitution and Bylaws, or for ordering assessments.

SECTION 2. A minimum of fifty-one (51) percent of the membership shall be required to form a quorum to consider the expulsion of a member.

ARTICLE VII: Committees

SECTION 1. All standing and ad hoc committees shall act in an advisory capacity to the duly elected Executive Committee of the Association.

SECTION 2. The Membership Committee shall be composed of six (6) members: four (4) presidential appointees, each to serve for a period of four (4) years; the other two (2) members shall be District Representatives assigned by the Executive Committee for the latter two-year (2-year) portion of their term of office. The President, the Secretary, and the Treasurer shall be ex-officio members of the Committee.

- a. The Chairman shall be the senior appointed member of the Committee, i.e. that appointed member who is in his/her fourth year on the Committee.
- b. The deadline for submission of applications to the Secretary of the Association shall be May 1 preceding the Annual Meeting.
- c. The Secretary of the Association shall send all applications and related data to this Committee at an appropriate interval preceding the Annual Meeting.
- d. The Membership Committee shall convene and present annually to the Executive Committee the complete list of candidates and their recommendation on each of them.

BYLAWS CONTINUED

SECTION 3. The Program Committee shall consist of six (6) members: four (4) presidential appointees, each to serve for a period of four (4) years; the other two (2) members shall be District Representatives assigned by the Executive Committee for the first two-year (2-year) portion of their term of office. The President, the Secretary, and the Recorder shall be ex-officio members.

- a. The Chairman shall be the senior appointed member, i.e. that appointed member who is in his/her fourth year on the Committee.
- b. The deadline for submission of abstracts to the Secretary of the Association shall be in accordance with published guidelines of the Association.
- c. After individual preliminary evaluation of all abstracts, this Committee shall convene for purposes of final selection of the program for the Annual Meeting.

SECTION 4. The Executive Committee shall act as a Budget Committee with reference to necessary secretarial expenditures for officers and committee members, subject to the approval of the membership.

SECTION 5. ADVISORY NOMINATING COMMITTEE. The Executive Committee shall act as the Nominating Committee at the Annual Meeting. In turn, the Executive Committee shall appoint an Advisory Committee, consisting of the three (3) immediate Past-Presidents and the senior District Representative. The Chairman of this Advisory Committee shall be the immediate Past-President. This Advisory Committee shall discuss suitable nominees to fill the officer and representative vacancies which shall occur at the time of the Annual Meeting, and shall submit its recommendations to the Executive Committee for consideration. The President and Secretary shall serve as ex-officio members.

SECTION 6. The Executive Committee shall appoint the Chairman of the Committee on Local Arrangements at least one (1) year in advance. In coordination with the Secretary and Treasurer he/she shall be responsible for all details pertaining to the Annual Meeting unless otherwise ordered by the Executive Committee.

ARTICLE VIII: Seal and Certificate of Membership

SECTION 1. The Seal shall be circular in form and bear the name of the Association about the border. In the center shall be portrayed the Western Country, similar to the State Seal of Kansas. The Association was founded in Topeka, Kansas, 1891.

SECTION 2. The Association shall issue a Certificate of Membership signed by the President and Secretary.

BYLAWS *CONTINUED*

SECTION 3. The Certificate of Membership shall be as follows:

WESTERN SURGICAL ASSOCIATION
FOR THE CULTIVATION PROMOTION AND DIFFUSION OF
KNOWLEDGE OF THE ART AND SCIENCE OF SURGERY
HAS ELECTED

TO ACTIVE MEMBERSHIP
OR
HONORARY MEMBERSHIP



President _____ Secretary

Date

BYLAWS CONTINUED

ARTICLE IX: Nominations and Elections

SECTION 1. Nominations for all Officers shall be made at the Executive Session of the Annual Meeting by the Executive Committee of the Association. Additional nominations may be made from the floor.

SECTION 2. The election of Officers shall take place at the Executive Session of the Annual Meeting. An affirmative vote of a majority of the members voting at the Executive Session shall constitute an election.

SECTION 3. Any vacancy occurring during the year among the Officers of the Association shall be filled by the action of the Executive Committee. Any vacancy occurring among Committee Members shall be filled by action of the President.

ARTICLE X: Order of Business

SECTION 1. Order of Business of the Executive Committee

1. Reading of minutes of last meeting
2. Reports:
 - a. Secretary
 - b. Treasurer
 - c. Recorder
3. Reports of Program and Membership Committees
4. Reports of Representatives of American Board of Surgery and the Board of Governors and Advisory Council on Surgery of the American College of Surgeons
5. Unfinished Business
6. New Business
7. Nominations:
 - a. Locations of Future Meetings
 - b. Chairman of Committee on Local Arrangements
8. The report of the Advisory Committee on Nominations shall be considered, and a slate of nominations for officers shall be prepared.
9. The report of the Executive Committee of the Association shall be discussed in preparation for its presentation by the Secretary to the membership of the Association in Executive Session at the Annual Meeting.

BYLAWS *CONTINUED*

SECTION 2. Executive Session of the Annual Meeting

1. Reading of previous year's minutes of the Executive Session of the Annual Meeting
2. Report of Executive Committee meetings to the Association by the Secretary
3. Report of the Treasurer
4. Report of the Recorder
5. Report of the Representative Board of Governors, American College of Surgeons
6. Report of the Representative American Board of Surgery
7. Report of the Representative Advisory Council on Surgery, American College of Surgeons
8. Report of Program & Membership Committees
9. Unfinished Business
10. New Business
11. Election of New Members
12. Election of New Officers
13. Adjournment

ARTICLE XI: Alterations in the Constitution and Bylaws

No part of the Constitution or Bylaws may be amended, altered or replaced, except at a regular Annual Meeting of the Association in Executive Session. The suggested amendment, alteration or repeal in the Constitution or Bylaws must have been presented in writing at the Executive Session of the previous Annual Meeting, signed by three (3) members. Notice of the proposed amendment, alteration or repeal shall be given in writing with the call to the Annual Meeting. The adoption of the suggested amendment, alteration or repeal shall be by vote of three-fourths of the members voting, a quorum being present at the Executive Session.

ARTICLE XII: Parliamentary Authority

Sturgis' Standard Code of Parliamentary Procedure, the current edition, shall be the parliamentary authority in all matters not specified in the Constitution, Bylaws or standing rules of this organization.



Past Presidents & Meeting Places

PAST PRESIDENTS & MEETING PLACES

PRESIDENT	PLACE	YEAR
S.S. Todd*	Topeka	1891
Milo B. Ward*	Kansas City	1892
Milo B. Ward*	Des Moines	1893
Lewis Schooler*	Omaha	1894
John E. Summers, Jr.*	Kansas City	1895
Thomas J. Beattie*	Topeka	1896
Joseph Eastman*	Denver	1897
David S. Fairchild*	Omaha	1898
Homer C. Crowell*	Des Moines	1899
O. Beverly Campbell*	Minneapolis	1900
August F. Jonas*	Chicago	1901
James E. Moore*	St. Joseph	1902
Alexander H. Ferguson*	Denver	1903
Charles H. Mayo*	Milwaukee	1904
Harvey D. Niles*	Kansas City	1905
Malcolm L. Harris*	Salt Lake City	1906
Charles W. Oviatt*	St. Louis	1907
William W. Grant*	Minneapolis	1908
Arthur L. Wright*	Omaha	1909
John P. Lord*	Chicago	1910
Amos W. Abbott*	Kansas City	1911
Lewis L. McArthur*	Cincinnati	1912
Jabez N. Jackson*	St. Louis	1913
Bryon B. Davis*	Denver	1914
Joseph R. Eastman*	Des Moines	1915
Lawrence W. Littig*	St. Paul	1916
Leonard Freeman*	Omaha	1917
James F. Percy*	Chicago	1918
Roland Hill*	Kansas City	1919
Arthur T. Mann*	Los Angeles	1920
Charles D. Lockwood*	St. Louis	1921
Miles F. Porter*	Minneapolis	1922
Horace G. Wetherill*	Colorado Springs	1923
Donald Macrae, Jr.*	French Lick Springs	1924
Willard D. Haines*	Wichita	1925
Robert C. Coffey*	Duluth	1926
Lewis H. McKinnie*	Omaha	1927
Kellog Speed*	Chicago	1928
E. Starr Judd*	Del Monte	1929

PAST PRESIDENTS & MEETING PLACES

Carl E. Black*	Kansas City	1930
Clarence G. Toland*	Denver	1931
Harry P. Ritchie*	Madison	1932
Samuel C. Plummer*	Cincinnati	1933
Frank R. Teachenor*	St. Louis	1934
Reginald H. Jackson*	Rochester	1935
Thomas G. Orr*	Kansas City	1936
Fred W. Bailey*	Indianapolis	1937
Casper F. Hegner*	Omaha	1938
Vernon C. David*	Los Angeles	1939
Alfred Brown*	Topeka	1940
Albert H. Montgomery*	St. Paul	1941
Willis C. Gatch*	No General Meeting	1942
Willis D. Gatch*	No General Meeting	1943
Willis D. Gatch*	Chicago	1944
James C. Masson*	Chicago	1945
Arthur R. Metz*	Memphis	1946
William M. Mills*	Colorado Springs	1947
Harry B. Zimmerman*	St. Louis	1948
Robert L. Sanders*	Santa Barbara	1949
Warren H. Cole*	Minneapolis	1950
Erwin R. Schmidt*	Colorado Springs	1951
George B. Packard*	Houston	1952
Lawrence Chaffin*	Chicago	1953
Herbert H. Davis*	Colorado Springs	1954
Michael L. Mason*	Seattle	1955
Charles G. Johnston*	Cincinnati	1956
Everett P. Coleman*	Salt Lake City	1957
James B. Brown*	Rochester	1958
James T. Priestley*	Colorado Springs	1959
Caleb S. Stone, Jr.*	Detroit	1960
John T. Reynolds*	San Francisco	1961
Jacob K. Berman*	St. Louis	1962
Charles W. Mayo*	Galveston	1963
Eugene A. Osius*	Colorado Springs	1964
Arthur J. Hunnicutt*	Omaha	1965
Walter W. Carroll*	Phoenix	1966
O. Theron Claggett*	Los Angeles	1967
Merle M. Musselman*	Chicago	1968
Arthur C. Pattison*	Dallas	1969

PAST PRESIDENTS & MEETING PLACES

PRESIDENT	PLACE	YEAR
Kenneth C. Sawyer*	Colorado Springs	1970
Raleigh R. White*	Portland	1971
Carl P. Schlicke*	Rochester	1972
Tom D. Throckmorton*	Houston	1973
Darrell A. Campbell*	San Francisco	1974
Chester B. McVay*	Colorado Springs	1975
William P. Mikkelsen*	Coronado	1976
Allen M. Boyden*	Las Vegas	1977
D. Emirick Szilagyi*	Scottsdale	1978
Harvey R. Butcher, Jr.*	Colorado Springs	1979
William H. ReMine*	Salt Lake City	1980
Paul E. Hodgson*	Albuquerque	1981
James J. Berens*	Kansas City	1982
Robert E. McCurdy*	Monterey	1983
George L. Jordan, Jr.*	Colorado Springs	1984
Martin A. Adson*	Rochester	1985
R. Dale Liechty*	Detroit	1986
Alexander J. Walt*	Dallas	1987
Melvin A. Block	Coronado	1988
J. Bradley Aust*	St. Louis	1989
David G. Ashbaugh	Scottsdale	1990
John L. Glover*	Colorado Springs	1991
Arthur J. Donovan	San Antonio	1992
George E. Block*	Seattle	1993
Basil A. Pruitt, Jr.	Palm Desert	1994
Norman W. Thompson	Chicago	1995
Jon A. van Heerden	Portland	1996
Jack R. Pickleman	Colorado Springs	1997
Jay L. Grosfeld	Indianapolis	1998
Thomas V. Berne	Santa Fe	1999
Amilu S. Rothhammer	Dana Point	2000
J. David Richardson	San Antonio	2001
Claude H. Organ*	Vancouver, British Columbia	2002
Richard A. Prinz	Tucson	2003
Fabrizio Michelassi	Las Vegas	2004
Arthur S. McFee*	Rancho Mirage, CA	2005
Richard C. Thirlby	Los Cabos, México	2006
Merril T. Dayton	Buffalo, NY	2007
Bruce L. Gewertz	Santa Fe, NM	2008

PAST PRESIDENTS & MEETING PLACES

Wayne H. Schwesinger	San Antonio, TX	2009
Michael B. Farnell	Chicago, IL	2010
Gregory J. Jurkovich	Tucson, AZ	2011
Raymond J. Joehl	Colorado Springs, CO	2012
Clive S. Grant	Salt Lake City, UT	2013
Steven C. Stain	Indian Wells, CA	2014
William C. Chapman	Napa, California	2015

**Deceased*



Deaths & Memorials

IN MEMORIAM CONTINUED

DEATHS REPORTED 2014-2015

Ben Bachulis

Daniel Carmichael

Robert Condon

J. Robert Edwards

Max Gaspar

Daniel C. Hunter, Jr.

Arthur S. McFee

Raymond Read

Erwin R. Thal

Fred L. Turrill

IN MEMORIAM CONTINUED



DANIEL H. CARMICHAEL, MD **1944 - 2014**

Daniel H. Carmichael, born on July 8, 1944, died on December 11, 2014, from nephrology cancer. He was preceded in death by his son, Patrick Scott Carmichael. He is survived by his wife of 46 years, Walta; daughters, Wendy Catherine Carmichael, and son-in-law, Michael Ibarra, of Houston, Texas; and Shelley Amanda Carmichael, and son-in-law, Josh DuBose, of Los Angeles, California. Born in Philadelphia and raised in Alabama, he received a degree in religion from Princeton University in 1966, where he was a member of the swim team and Charter Club. He received his medical degree from Columbia University's College of Physicians and Surgeons in 1970. After a surgical residence at Barnes Hospital in St. Louis and a stint at the U.S. Army Medical Corps, he began practice in Oklahoma City in 1977. His special interest was in cancer surgery, and he was a Principal Investigator for the NSABP Study Group, serving time on their Breast Cancer Surgery Committee in the 1980s. He enrolled many patients on protocols, including the lumpectomy study which showed the efficacy of breast-conserving surgery. For years, he enjoyed teaching medical students and residents, publishing many articles with the latter. He was certified by the American Board of Surgery and was a member of the American College of Surgeons, the Western Surgical Association and many other organizations. Additionally, during the 1980s, he served as Medical Director of AMCARE, then the emergency medical services provider for central Oklahoma. Upon career redirection, he spent half his time on his ranch involved in fishing, hunting, hydrology projects to include dam construction and rain water harvesting, off-grid solar power systems, woodworking, and extensive reading in religion, history, and science. Numerous other pursuits filled the days. Major regret: No 30 hour days.

Tribute received by: [Legacy.com](https://www.legacy.com)

IN MEMORIAM CONTINUED



ROBERT E. CONDON, MD

1929 - 2015

Dr. Robert Condon, a major figure in American and international surgery passed away February 10, 2015.

He was born in Albany, New York, in 1929. He received his MD in 1957 from the University of Rochester School of Medicine and Dentistry. In 1965 he completed residency training at the University of Washington. He was a major contributor to Harkins and Nyhus' Hernia, which in a later edition was renamed, Nyhus and Condon's Hernia; the definitive reference for hernia repairs for over 30 years.

Dr. Condon served on the faculty at the University of Washington, the Baylor University College of Medicine, the University of Illinois College Of Medicine in Chicago, and the University Of Iowa College Of Medicine. At the Medical College of Wisconsin (MCW) he was installed as Chair in 1979, and retired in 1995 as the Ausman Foundation Professor.

Dr. Condon published 21 books, 101 book chapters and more than 250 peer reviewed publications. He was a governor for the American College of Surgeons, Vice-President of the American Surgical Association, Society for Surgery of the Alimentary Tract, and James IV Association, he served as President of the Wisconsin Surgical Society, The Central Surgical Association and the Surgical Infection Society, and International Society for Digestive Surgery, and on the Executive Committee of the Société Internationale de Chirurgie.

Dr. Condon is survived by his wife Marcia, who he met in kindergarten, and to whom he was married for 64 years, and two sons, Sean Edward Condon and Brian Robert Condon.

Tribute written by: E. Christopher Ellison, MD FACS

IN MEMORIAM CONTINUED



J. ROBERT EDWARDS, MD

1932 - 2014

Dr. J. Robert Edwards, 81, of Auburn, died Wednesday, Sept. 24, 2014, at Parkview Regional Medical Center in Fort Wayne.

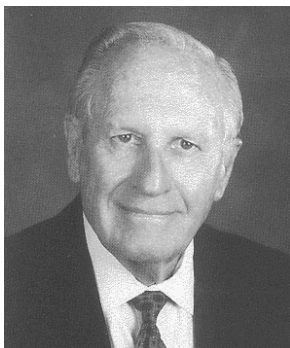
Dr. Edwards was born Dec. 5, 1932, in Detroit, Michigan, the son of the late Ralph and Florence Edwards. He was the first board certified surgeon in Auburn, practicing medicine from 1968-2004. After retirement, he continued to serve the community through his volunteer work at Saint Martin's Health Clinic, Garrett.

Survivors include his wife, G. Edwards of Auburn; children Duncan R. (Patricia Norcia) Edwards of Clinton, Connecticut, Elizabeth E. (Bruce D.) Horrigan of Avon, Ohio, and Bruce A. (Laila Voss) Edwards of Cleveland, Ohio; grandchildren, Emily (George) Russ of Fairview Park, Ohio, Meredith Horrigan of Avon, Ohio, Francesca Edwards of Clinton, Connecticut, and Lucas Edwards of Clinton, Connecticut; and a sister, Nancy (Richard) Edwards Cogswell of Medford, Oregon.

He was preceded in death by his wife, Joyce M. Nugen, on Dec. 30, 1969.

Tribute written by: KPCnews.com

IN MEMORIAM CONTINUED



MAXIMILLIAN R. GASPAR, MD **1915 - 2012**

Maximillian Raymond Gaspar was born in Kingsley, Iowa in 1915. He grew up in nearby Sioux City and attended Morningside College where he graduated in 1936. He entered medical school at the University of South Dakota in Vermillion, but transferred to the University of Southern California School of Medicine in 1938 when his father relocated the family to Los Angeles. Dr. Gaspar received his MD from the University of Southern California in 1940 and following graduation, obtained a rotating internship and subsequently a General Surgery Residency at Los Angeles County General Hospital. That began a “love affair” with the historic medical facility that would last a lifetime. His surgical training at County was interrupted by World War II in which he alternated duty between the Los Angeles County Hospital, the Naval Hospital in San Diego and the U.S.S. Kankakee in the Pacific. While at sea on the Kankakee, he survived three typhoons. Following the end of the war, he finished his General Surgery residency in 1948 and received certification as a Diplomate of the American Board of Surgery in 1949.

Dr. Gaspar and his long time partner, the late Dr. Herbert J. (Chop) Movius, established an active and highly visible surgical practice in Long Beach, California. Their partnership, surgical expertise and mutual interest in vascular surgery resulted, according to Max, in the establishment of the first vascular surgery fellowship in the United States. The debate of who was first to establish a vascular surgery fellowship, Dr Edwin J. Wylie at UCSF or Dr Gaspar in Long Beach was a frequent topic of amiable disagreement over the years. Ultimately, Max and his Long Beach surgical partners trained over 60 vascular surgery fellows prior to the fellowship moving on to Harbor-UCLA under the direction of Dr Eric Wilson and Dr. Rod White.

Dr. Gaspar was a Clinical Professor of Surgery at the University of Southern California and Loma Linda

IN MEMORIAM CONTINUED

University for over three decades. He served as Senior Vascular Attending at Los Angeles County Hospital for 25 years where he along with other voluntary faculty and surgical residents cared for patients with vascular disorders. He conducted weekly teaching rounds which attracted a large number of the practicing vascular surgeons in Los Angeles County. His intellect and insights into successful management of vascular disease, patient selection and indications for specific vascular procedures along with his prudent judgment served as an irresistible attraction to the practicing Los Angeles vascular surgeon as well as to residents and fellows in training. Through this educational forum he indelibly impacted the practice of vascular surgery in Los Angeles, Southern California and the western United States. His importance to the vascular surgery community resulted in the Gaspar Endowed Lectureship in Vascular Surgery at the University of Southern California and an annual Gaspar Vascular Symposium which is in its 18th year.

As one of a small cadre of surgical pioneers in the 1950s with a specific interest in vascular disease and vascular surgery, he perfected methods for preservation of human aortic allografts as an aortic replacement. He would bring freeze dried aortic allografts in vacuum tubes to the operating room from the County Hospital basement, rehydrate them and insert them as aortic replacements for patients with abdominal aortic aneurysms. He also contributed significantly to the evolving technical aspects of carotid endarterectomy in the 1960s and 70s. He authored a textbook, numerous book chapters and articles during his influential career.

As a leader in surgery, he was the Recorder for the Pacific Coast Surgical Association from 1968 to 1973 and President of the Association in 1975. He also served as a Governor to the American College of Surgeons (1962-1971), was a founding member of the Southern California Vascular Surgical Society and a member of the American Surgical Association, Western Surgical Association and Society for Vascular Surgery.

Dr Gaspar was an individual of even temperament and brilliant intellect which was elevated by his midwestern common sense. He was also a man of many interests. Among these were flying, tennis, skiing and fly-fishing. He was a certified pilot who owned a plane for many years often flying cross country to medical meetings. His tennis skill was well known, and included many tough matches with Dr Eugene Strandness from University of Washington who was a dear friend. An excellent athlete, he took up skiing after the age of 50 and was still skiing at 92 before a number of medical issues forced him to retire from the slopes. Fly-fishing in Sun Valley, Idaho where he had a second home was one of his greatest delights.

Max left us at the age of 97 with his family attending to him at his beloved Sun Valley home. He is survived by his wife Lia, six children, ten grandchildren and 11 great grandchildren. He will be missed but he left us with many blessed memories and a life well lived.

Tributed written by: Fred A Weaver MD

IN MEMORIAM CONTINUED



DANIEL CLYDE HUNTER, JR., MD **1922 - 2012**

Daniel Clyde Hunter, Jr. passed away Wednesday morning, August 22, 2012 in his home from natural causes. Dr. Hunter was born to Daniel Clyde Hunter, Sr. and Gwyneth Evans Hunter in Ephraim, Utah on September 26, 1922; the oldest of four children. In 1924, the family moved to Provo, Utah where they lived until 1938, when they moved to Salt Lake City. Dr. Hunter graduated from East High School in 1940 and went on to graduate from the University of Utah Medical School in the spring of 1946. During his time at the University of Utah, he served as president of Sigma Chi fraternity. On June 4, 1945 he married Margaret "Margie" Webb in the Salt Lake Temple. Dan and Margaret then moved to Ann Arbor, Michigan for his residency training at the University of Michigan Medical School. During his residency, he served as a Captain in the Air Force on Walker Air Force Base in Roswell, New Mexico. After completing his military service, the family returned to Ann Arbor to complete his surgical training. Dr. Hunter was an Assistant Professor of Surgery at the University of Michigan Medical School until he moved to Ogden in 1960. Dr. Hunter had a private surgical practice until he retired in 1990. Shortly after retiring, he went to work as a physician for Hill Air Force Base and IHC Work Med in Ogden until he retired again in 2003. During his medical career he was a member of the Frederick A. Collier Surgical Society, the Western Surgical Association, the Society for Surgery of the Alimentary Tract, and served as Medical Director of the Ogden Surgical Center and President of the Ogden branch of the American Heart Association. Dr. Hunter was a lifelong member of The Church of Jesus Christ of Latter-day Saints. He served in many callings including Branch President, bishop, Stake High Council, member of the Bishopric, Church Service Missionary, High Priest Group Leader, and Ogden Temple Ordinance Worker. Dr. Hunter and Margaret, his wife of 67 years, have ten children, Daniel C. (Beverly) Hunter III, M. Kathryn (Layton) Alldredge, David W. (Carol) Hunter, Karen H. (Walter) Kunz, R. Christopher (Mary Rae) Hunter, M. Susan Hunter, Rebecca H. (Mich) Oki, J. Scott (Carolynn) Hunter, Curtis T. (Kelly) Hunter, and Joseph A. Hunter; and have 35 Grandchildren and 49 Great-Grandchildren.

Tribute received by: 8/24/12 Newspaper

IN MEMORIAM CONTINUED



ARTHUR S. MCFEE, MD

1932 – 2015

Arthur Storer McFee was born in Portland, Maine on May 1, 1932. As a child, at the age of four, he developed acute surgical mastoiditis which required mastoidectomy. This operation was performed under open drip ether anesthesia. It took four months for him to eventually recover. From that time forward his course was set to become a physician. Arthur was educated in the public schools of Portland. Following high school he attended and graduated cum laude from Harvard College with a Bachelor's degree in Romance Languages (1953). Four years later Dr. McFee graduated from Harvard Medical School. Following medical school he entered into the fabled University of Minnesota residency program under the tutelage of Dr. Owen Wangenstein. While there, he received a Master of Science degree in Biochemistry and a PhD in Surgery. A number of his fellow residents became life-long friends and colleagues. One of these, J Bradley Aust, recruited Dr. McFee to become one of the founding faculty of a new medical school in San Antonio.

Prior to joining the faculty, Dr. McFee served two years in the United States Navy serving in Vietnam and Charleston, South Carolina. Iris and Arthur had not visited Texas, but in 1968 they arrived sight unseen to San Antonio to help build a new medical school in South Texas. Dr. McFee stayed at this same institution and the same community for the remainder of his life. He was named a full professor in 1974, and became the Chief of the Division of General Surgery in 1996. During his career he played critical roles in all facets of surgical care at University Hospital, serving as the chief of the operating room, director of the surgical intensive care unit and chief of the medical staff. He was the critical founding member and life-long steward of the Aust Surgical Society, an alumni organization dedicated to helping and mentoring surgical residents from the residency he and his colleagues built in San Antonio.

Dr. McFee's entire professional life was spent in the education of surgeons. Last evening, as Dr. McFee peacefully passed away at his home, the surgery

IN MEMORIAM CONTINUED

ARTHUR S. MCFEE, MD *continued*

program he invested his life toward building was hosting its annual graduation ceremony successfully graduating its 300th surgical resident. Arthur McFee played a meaningful and vital role in the education of all 300 of these surgeons, and his legacy endures in the cumulative work of these dedicated men and women. Forty-one years ago, as he created and became the principal steward of the Aust Surgical Society, he became the thread responsible for holding these surgeons together, binding the past with the future. His mentor and teacher, Dr. Wangenstein was fond of a quote which is emblematic of Dr. McFee's life: "A teacher affects all eternity; the teacher can never tell where his or her influence ends."

In addition to his beloved role as an educator and mentor of surgical residents and students, Dr. McFee was a leader in American Surgery. He was a senior member of the American Surgical Association, the Halsted Society, the Southern Surgical Association, the Western Surgical Association and the Texas Surgical Society. He served as President of both the Western Surgical Association and the Texas Surgical Society.

Arthur met his life-long love Iris during their time in Minnesota. Iris was originally from North Dakota and was working in the Department of Pediatrics at the University of Minnesota. Arthur and Iris met and were married the year before arriving in San Antonio. Iris was the first Administrator of the newly formed Department of Surgery. Together Arthur and Iris seemed made for each other and were critically important in building a successful and strong Department of Surgery and School of Medicine. Arthur and Iris became important community leaders and patrons of the arts in San Antonio. Dr. McFee has been the principal historian of the early work of the Department of Surgery. Dr. McFee played critical roles in leading fund raising efforts for the San Antonio Symphony. The McFee's have been generous and consistent contributors to the Aust Society; the School of Medicine—establishing an endowed Professorship in Surgery (Dr. Arthur S. & Iris G. McFee Professorship in Surgery) and the Dr. and Mrs. McFee Veritas Group; Harvard College; Harvard Medical School and his hometown high school, Deering High School, Portland, Maine.

Arthur Storer McFee, MD PhD was a true gentleman, a highly skilled and capable surgeon, and a quick-witted meticulous and gifted scholar. Dr. McFee committed his life to making the world around him a better place. Through the surgeons and students he influenced and molded, he leaves an enduring legacy in South Texas and across the globe. He will be sorely and sadly missed. Please keep Iris McFee in your thoughts and prayers.

Tribute written by: Ronald M. Stewart, MD

IN MEMORIAM CONTINUED



RAYMOND C. READ, MD

1924 - 2014

Dr. Raymond C. Read, surgeon, early anti-smoking advocate, and pioneer in hernia research, died in late November at age 90 in Rockville, Maryland. His contagious zest for life, keen intellect, and strength of character touched many over his long life of public service and family devotion.

Born and raised in London, England during the Depression and World War II, Dr. Read overcame family tragedies, financial challenges, and the Blitz through focus on academic study. His self-discipline and teacher mentorship won him a scholarship to Cambridge University in 1941, where he earned a B.A. in natural sciences. He received a Rockefeller scholarship, enabling him to obtain his M.D. at the University of Minnesota. In 1944, Dr. Read sailed to the United States on the S.S. Mauritania, which zigzagged across the Atlantic to avoid German U-boats. In Minneapolis, he met Lillian, a nurse, who became his wife of 64 years. Together, they returned to England in 1946, where Dr. Read completed his MB BCh and his MA with first class honors at Cambridge University and also his military service in the British Royal Air Force. He obtained residency training at Kings College Hospital in London. Dr. Read became a Fellow of the Royal College of Surgeons of England before returning to the U.S. to obtain graduate training at the Peter Bent Brigham Hospital in Boston as the Harvey Cushing Fellow in Surgery at Harvard Medical School. Subsequently, he earned his MS in physiology and his PhD in surgery at the University of Minnesota, where he was a resident in surgery at the University of Minnesota Hospitals and then Chief Resident. He was an Instructor and then Assistant Professor in the Department of Surgery at the University of Minnesota, and became a Fellow of the American College of Surgeons. Dr. Read was Board-certified in Surgery and Thoracic Surgery. His career as a general and thoracic surgeon, surgery professor, and medical researcher, took him to Wayne State University in Detroit, where he was Associate Professor of Surgery, and, by 1966, to Little Rock as the Chief of Surgical Services at the U.S. Veterans Administration.

IN MEMORIAM CONTINUED

RAYMOND C. READ, MD *continued*

Hospital and Professor of Surgery at the University of Arkansas for Medical Sciences. He retired in 2001 at age 77.

Dr. Read's career spanned several decades. A staunch advocate of scientific truths and the importance of education and lifelong learning, he valued his role as a teacher of the next generations of surgeons. His contribution to medical research is chronicled in over 500 publications over a 60 year period beginning in 1953. He was a founding member of the Society of Thoracic Surgeons and of the American Hernia Society. Dr. Read served as President of the Association of Veterans Administration Surgeons, the Southwestern Surgical Association, and the American Hernia Society. He was a member of the Alpha Omega Alpha national medical honor society as well as over two dozen professional societies. Dr. Read was the recipient of numerous awards, including the Distinguished Service Award from the Association of Veterans Administration Surgeons, and was inducted into the UAMS College of Medicine Hall of Fame in 2005. A leader in efforts to prohibit smoking in Veterans Administration hospitals, Dr. Read's research regarding 'metastatic emphysema' revealed that chronic smoking could damage connective tissue both inside and outside of the lung. He was recognized as a pioneer in the field of herniology because of this and other research over decades, and was the recipient of numerous speaking invitations, including the keynote address at the International Hernia Congress in Berlin, Germany in 2009.

With endless energy and enthusiasm, Dr. Read lived life to the fullest, never wasting time and continually expressing his gratitude for his many blessings. He had an insatiable appetite for the written word and thoroughly relished reading his beloved New York Times and puzzling over the crossword. Dr. Read delighted in listening to opera and classical music, greeting neighbors on walks, and playing a challenging round of golf. His Certification from The National Hole-In-One Association was a highlight. Dr. Read traveled extensively and remained attached to his beloved England, returning there frequently to visit family and friends.

From escorting his children to a 1964 Beatles concert, to attending countless Little League games and piano recitals, he took great joy in his family. He is survived by his three children (Jeremy of St. Albans, Vermont; Charlotte of San Francisco, California; and Jennifer of Rockville, Maryland) and three grandchildren. Memories of his life well-lived through optimism and witty intellect, matched by his unfailing work ethic and respect for others, will be treasured always. He will be greatly missed.

Tribute written by: Jennifer Read, MD

IN MEMORIAM CONTINUED



ERWIN R. THAL, MD

1936 - 2014

It is with great sadness that we need to let you know that Dr. Erwin R. Thal peacefully passed away early this morning (December 13, 2014) from an acute illness with his family, friends and colleagues at his bedside.

Dr. Thal's work through the American College of Surgeons (ACS) Committee on Trauma (COT) transformed the care of the injured patient. He and his colleagues developed and implemented the Trauma Center Verification Program. Under Dr. Thal's leadership and guidance as the Chair of the ACS Committee on Trauma the Trauma Center Verification Program moved from an idea to reality. His energetic leadership provided the driving force for this program. The principles developed by Dr. Thal and his colleagues have become the building blocks of the American College of Surgeons approach to quality improvement and health care reform. As a result, his work has improved and is improving the care of literally millions of injured or ill patients worldwide. Dr. Thal was honored in 1992 as the Scudder Orator where he presented his address, Out of Apathy.

Dr. Thal served as a Professor in the Department of Surgery at UT Southwestern Medical Center in Dallas. He was a beloved and inspirational leader at UT Southwestern and Parkland for fifty years. Dr. Thal received his Doctor of Medicine degree from The Ohio State University College of Medicine in 1962. He completed his internship at Parkland Memorial Hospital in 1963, followed by general surgery residency at Parkland and UT Southwestern, completing his training in 1969. As soon as he finished residency, he became a faculty member at UT Southwestern, and has served as Professor of Surgery there since 1982. In this role he first led and developed the Emergency Department at Parkland Hospital, followed by the development of the Level I Trauma Center at Parkland. He cheerfully and enthusiastically mentored thousands of students, surgeons and nurses who went on to transform care of the injured

IN MEMORIAM CONTINUED

ERWIN R. THAL, MD *continued*

and ill patients worldwide.

In his home state, Dr. Thal was one of a handful of key leaders responsible for establishing, developing and launching the Texas Trauma System. His leadership was essential in the building a robust Texas trauma system.

Dr. Thal's abundant enthusiasm and outgoing, inspirational personality will be profoundly missed. Although missed, Dr. Thal's legacy lives on in the efforts of the ACS Committee on Trauma. It is clearly visible today in the efforts to continually improve and advance the care of injured patients in trauma centers across the world.

Tribute written by: Ronald M. Stewart, MD

IN MEMORIAM CONTINUED



FRED L. TURRILL, MD

1922 – 2014

Fred L. Turrill passed away peacefully in the presence of his family on Christmas Eve. Born in Redlands to the late Gardner S. and Marie J. Turrill, Fred spent most of his life in Glendale, CA. He graduated Valedictorian of the Hoover High School class of 1940, and after two years at Glendale College, served in the U.S. Army Air Force from 1942-1946 as a Chemical Engineer. Fred graduated from the Univ. of Michigan in 1947 and the USC School of Medicine in 1951. That year, he married his lifetime sweetheart, Edith Brown, and they were happily married for 63 years. Fred practiced general surgery in Glendale from 1956 to 1989, and was an active staff member at Memorial Hospital of Glendale and Verdugo Hills Hospital. He was also a Clinical Professor of Surgery and was a member of the Senior Attending Staff at the LA County/USC Medical Center. In addition, Fred was an active member of numerous (12) medical associations during his medical career. In 2002 following retirement, Fred and Edith moved to Stockton, CA to be near their daughter, Ann. The family would like to express a special thank you to the compassionate staff at OCW/ Meadowood for their remarkable job in providing quality care to Dad for the last two years of his life.

Fred is preceded in death by his brothers, Jack and Bruce, sons Brian and Kevin, and son-in-law Steven Ebert. He is survived by the wife he adored, Edith Brown Turrill, daughter Ann Ebert, son Mark and daughter-in-law Carmen, and daughter-in-law Linda. He is also survived by grandchildren Todd (Laurie), Jonna, Peter (Rachel), Rachel and Rebecca Ebert, Schuyler, Abigail, Lillian, and great grandson Zyzic. He will be remembered as a devoted and loving husband, father and grandfather, as a dedicated member of the medical community, as an expert hunter and fisherman, and for taking his family on some amazing vacation destinations, especially all the houseboat trips! The legacy he leaves behind is his faithful commitment to family.

Tribute received by: Recordnet.com

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November 5 – 8, 2016



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2016 ANNUAL MEETING

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