The Society of Black Academic Surgeons

In Joint Sponsorship With

The University of North Carolina at Chapel Hill

presents the

Twenty-Fifth Annual Meeting

April 9 - 12, 2015

The Carolina Inn

Chapel Hill, North Carolina

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

UNC DEPARTMENT OF SURGERY

UNC DEPARTMENT OF SURGERY

welcomes

The Society Of Black Academic Surgeons

to the

University of North Carolina at Chapel Hill

WE WOULD LIKE TO INVITE YOU TO JOIN US FOR A SPECIAL EVENT AT

THE DEAN E. SMITH CENTER

"THE DEAN DOME"

ON FRIDAY, APRIL 10, 2015 FROM 7:00 - 10:30 PM

TOUR OF UNC BASKETBALL MUSEUM

SPEAKER: UNC BASKETBALL #33 CHARLES SCOTT
FIRST AFRICAN AMERICAN SCHOLARSHIP ATHLETE FOR UNC

DINNER RECEPTION AT 7:00

PROGRAM OBJECTIVES

The goal of the program is to disseminate knowledge about the recent advances in basic science and clinical research in surgery. The key program objectives are as follows:

1. To understand current concepts of cardiothoracic surgery, vascular surgery, trauma management, acute care surgery, oncologic surgery, pediatric surgery, bariatric surgery, health disparities, and surgical outcomes research.
2. To understand the role of the surgeon and the burden of surgical disease in resource poor countries.
3. To learn a systematic approach to starting and maintaining a mentor to mentee relationship.
4. To discuss and explore strategies for grant writing.
5. To discuss the unequal outcomes in morbid obesity surgery for minority patients.
6. To learn the important factors related to career development and becoming an effective leader within an academic health care system.
7. Provide mentorship to colleagues and a continued culture of academic excellence.

American College of Surgeons
Division of Education

Accreditation Statement

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint providership of the American College of Surgeons and the Society of Black Academic Surgeons. 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 12.0 *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 11.0 credits meet the requirements for Self-Assessment.

Disclosure Information

In compliance with the ACCME Accreditation Criteria, the American College of Surgeons 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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Officers

President
Lynt B. Johnson, MD, MBA, FACS
Chairman, Department of Surgery
Robert J. Coffey Professor of Surgery
Georgetown University Hospital

Executive Director
L. D. Britt, MD, MPH, FACS, FCCM
Henry Ford Professor & Edward J. Brickhouse Chairman
Eastern Virginia Medical School

President-Elect
Orlando C. Kirton, MD, FACS, MCCM, FCCP
Ludwig J. Pyrtek, M.D. Chair in Surgery; Chief, Department of Surgery;
Chief, Division of General Surgery; Interim Director, Trauma Service, Hartford Hospital;
Professor of Surgery & Vice Chair, Department of Surgery,
University of Connecticut School of Medicine

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Patricia L. Turner, MD, FACS
Director, Division of Member Services, American College of Surgeons
Adjunct Associate Professor of Surgery,
University of Chicago

Treasurer
Jeffrey S. Upperman, MD, FACS
Associate Professor of Surgery
Director, Trauma Program & PDRTC
Children's Hospital Los Angeles

Program Chair
Andrea Hayes-Jordan, MD, FACS
Associate Professor of Surgery and Pediatrics
Director of Pediatric Surgical Oncology
The University of Texas MD Anderson Cancer Center

Informatics Officer
Hassan A. Tetteh, MD, MBA, FACS
Uniformed Services University of Health Sciences

Member At-Large
Sean E. McLean, MD, FACS
Assistant Professor of Surgery
UNC Pediatric Surgery

Society Historian
Frederick D. Cason, Jr., MD, FACS
Surgeon-in-Chief
Louis Stokes Veterans' Affairs Medical Center

Executive Council
Danny O. Jacobs, MD, MPH, FACS
Kenneth Davis, Jr., MD, FACS
Edward M. Barksdale, Jr., MD, FACS

Program Committee

Andrea A. Hayes-Jordan, MD – Chair
Linda Barry, MD
Andre Campbell, MD
Madison Cuffy, MD
Terrence Fullum, MD
Sean E. McLean, MD
Lisa Newman, MD
Lynn O'Connor, MD
Vincent Reid, MD
Wendy Ricketts-Greene, MD
Ayodele Sangosanya, MD

Committee on Local Arrangements

Dr. Anthony A. Meyer – Chair, University of North Carolina Department of Surgery
Dr. Sean E. McLean – Local Program Committee Chair
Dr. Bruce Cairns
Dr. Keith Amos (Posthumously)
Dr. Anthony Charles
Dr. Darhyl Johnson
Dr. Samuel Jones
Joellen Buckio, MHA
Mary Margaret Carroll
Ted Hobgood

Emergency Contacts

Dr. Sean McLean: Cellular Phone – 314-276-1095;
Office – 919-966-4643; Home – 919-237-2587

Mary Margaret Carroll: Cellular Phone – 919-236-3137

History of The Society of Black Academic Surgeons

The Society of Black Academic Surgeons (SBAS) was founded in 1989. Its goal is to stimulate academic excellence among its members by providing a forum of scholarship in collaboration with the leading Departments of Surgery in the U.S. It encourages and supports professional development of black surgical residents and attempts to recruit the best and brightest medical students into a career in surgery.

The annual meetings of SBAS, attended by members as well as numerous residents and students, provide outstanding programs in both the science and practice of surgery. The first Annual Meeting was hosted by the late Dr. David Sabiston at Duke University. Annual meetings since then have been hosted by Departments of Surgery throughout the U.S., including Harvard University (1991, 2001), University of California at Davis (1993), University of Texas Medical Branch at Galveston (1994), University of North Carolina at Chapel Hill (1995), University of Colorado at Denver (1996), SUNY Buffalo (1997), Howard University (1998, 2004, 2012), University of Louisville (1999), Charles R. Drew University of Medicine and Science (2000), Morehouse School of Medicine (2002), University of Alabama (2003), University of Pittsburgh (2005), University of Cincinnati (2006), Rush University Medical Center (2007), Cleveland Clinic (2008), Washington University in Seattle (2009), Duke University (2010), Massachusetts General Hospital (2011), Johns Hopkins School of Medicine (2012), University of Mississippi (2013), and Temple University School of Medicine and The University of Pennsylvania (2014).

SBAS is governed by an Executive Committee and has more than 200 members throughout the United States. Membership is not restricted by race; the criteria for membership require that the prospective member be a "reputable surgeon or surgical investigator who occupies a faculty position in a university department of surgery or free-standing surgical residency program." In addition to its Annual Meeting, a website (www.SBAS.net) has been established to improve communication with its constituency and persons interested in the organization. The *American Journal of Surgery* is the official publication of SBAS.

Past Presidents of The Society of Black Academic Surgeons

1989-1991: Arthur W. Fleming, MD

1991-1993: Onye E. Akwari, MD

1993-1995: Eddie L. Hoover, MD

1995-1997: Claude H. Organ, Jr., MD

1997-1998: LaSalle D. Leffall, Jr., MD

1998-1999: Haile T. Debas, MD

1999-2001: L. D. Britt, MD, MPH

2001-2003: Clive O. Callender, MD

2003-2004: Edward E. Cornwell, III, MD

2004-2005: Robert L. McCauley, MD

2005-2006: Selwyn M. Vickers, MD

2006-2007: Michael T. Watkins, MD

2007-2008: Steven C. Stain, MD

2008-2009: Robert S. D. Higgins, MD, MSHA

2009-2010: William Lynn Weaver, MD

2010-2011: Henri R. Ford, MD, MHA

2011-2012: Danny O. Jacobs, MD, MPH

2012-2013: Kenneth Davis, Jr., MD

2013-2014: Edward M. Barksdale, Jr. MD

Program Agenda

Thursday — April 9, 2015

12:00-6:30 pm	Welcome/Registration at the Carolina Inn, Chapel Hill, North Carolina (Gallery)
12:00-1:00 pm	Combined Luncheon for SBAS Leadership Fellows & Executive Council (Chancellors' East Ballroom)
1:00-5:00 pm	SBAS Executive Council Meeting (North Parlor)
1:00-5:00 pm	SBAS Leadership Institute (South Parlor)
5:00-6:30 pm	Women in Surgery Reception (Bryan Courtyard/ Sunroom)
6:30-8:30 pm	Welcome Reception (Old Wing)

Friday — April 10, 2015

6:00 am-5:00 pm	Registration at the Carolina Inn, Chapel Hill, North Carolina
6:00-6:45 am	Continental Breakfast (Chancellors' Ballroom)
6:45-7:15 am	Walk or Bus transportation to UNC, Chapel Hill
7:30-8:00 am	Opening Remarks and Speaker Introduction *Drs. Lynt Johnson, Andrea Hayes-Jordan, Sean McLean, Anthony Meyer, Chancellor Carol Folt*
8:00-9:10 am	LOCAL PROGRAM SPEAKERS
9:10-9:25 am	Break
9:25-10:50 am	LOCAL PROGRAM SPEAKERS
10:50-11:50 am	**PANEL DISCUSSION** – "Mentoring and Career Development the UNC Way" **Moderator:** *Bruce A. Cairns, MD, FACS* **Panelists:** *Drs. Cedric M. Bright, Giselle Corbie-Smith, David A. Gerber, Paul A. Godley, Benjamin Haithcock, Susan Henning*

Friday (cont.) — April 10, 2015

11:50 am-12:00 pm	Walking and Bus transportation back to hotel *(where afternoon sessions will occur)*
12:00-1:00 pm	Mentorship Lunch (Chancellors' Ballroom) "Successful Grant Writing: How to Choose the Right Grant for You" *Drs. Jeffrey Upperman & Adil Haider*
1:00-1:45 pm	**State of the Art Lecture** (Hill Ballroom)**:** "Making a Difference" *Anthony A. Meyer, MD, PhD* – Colin G. Thomas Distinguished Professor of Surgery & Chair, Department of Surgery, UNC Chapel Hill
1:45-2:00 pm	Break (Hill-Prefunction)
2:00-3:30 pm	**SCIENTIFIC SESSION #1** (Hill Ballroom) **Podium Presentations:** ***Trauma, General/ Pediatric Surgery***
3:30-4:30 pm	**SCIENTIFIC SESSION #2** (Old Well Room/ Club Room) **Poster Sessions:** ***Education and Outcomes; General Surgery and Trauma; Bariatric Surgery***
4:30-6:00 pm	Free Time
5:45-6:45 pm	Buses leave for the Dean E. Smith Center
7:00-10:30 pm	Welcome/Invited Speaker/Evening Event – Dean E. Smith Center ("Dean Dome")

Saturday — April 11, 2015

6:30 am-4:00 pm	Registration at the Carolina Inn
6:30-7:30 am	SBAS Committee Meetings – Education/Research, Advocacy, Membership, Finance, Informatics, Nominating Committees (Chancellors' East); Program Committee (Alumni Room)
6:30-7:30 am	Continental Breakfast (Colonnade)

Saturday (cont.) April 11, 2015

7:45-9:15 am	**SCIENTIFIC SESSION #3** (Hill Ballroom) **Podium Presentations:** ***Basic Science & Other***
9:15-9:30 am	Break (Hill Prefunction)
9:30-11:00 am	**SCIENTIFIC SESSION #4** (Hill Ballroom) **Podium Presentations:** ***Oncologic and Trauma Surgery***
11:00 am-12:30 pm	SBAS Members Business Meeting (Hill Ballroom)
12:30-1:25 pm	Mentorship Lunch (Chancellors' Ballroom)
1:25-2:15 pm	**Asa Yancey Lecture** (Hill Ballroom) *The Honorable Jonathan Woodson, MD* Assistant Secretary of Defense for Health Affairs, United States of America
2:15-2:30 pm	Break (Hill Prefunction)
2:30-4:30 pm	**SCIENTIFIC SESSION #5** (Hill Ballroom) **Podium Presentations:** ***Disparities, Education and Outcome***
4:30-4:40 pm	Introduction of the President
4:45-5:30 pm	**Presidential Address** *Lynt B. Johnson, MD, MBA, FACS* Robert J. Coffey Professor and Chairman, Georgetown University
5:30-7:30 pm	Free Time
6:30-7:30 pm	Reception (Colonnade)
7:30-11:00 pm	Black Tie Dinner / Awards Presentation / Dancing and Entertainment (Hill Ballroom)

Sunday April 12, 2015

7:30-11:15 am	**Community Mentorship Program for Undergraduate and Medical Students** (Bondurant Hall G100, UNC Chapel Hill)

Society of Black Academic Surgeons

Mentorship Program

Sunday April 12, 2015

7:30 am	Registration at Bondurant Hall G100 UNC Chapel Hill
7:30 am	Hotel Shuttle to provide transportation to Bondurant Hall upon request
7:40-7:50 am	**Welcome:** *Sean E. McLean, MD*
7:50-8:15 am	"The Future of American Surgery" What does that mean for present and future African-American surgeons? **Moderator:** *Dr. Anthony Charles*
8:15-8:55 am	Career in Surgery: What does it mean?…What are my choices?...How do I get there? – Academic Surgery vs. Private Practice – Surgical Research and What does that mean? – How do I become a leader in surgery? – How to have an impact upon society (local or globally) through a surgical career **Moderator:** *Dr. Samuel Jones*
8:55-9:00 am	Break
9:00-9:30 am	Specialization in Surgery: Choosing a subspecialty Why I do it...How I got there...Why I love it!!! **Co-Moderators:** *Dr. Darhyl Johnson and Dr. Obinna Adibe*

Mentorship Program (Cont.)

9:30-10:00 am	**Break-out Session:**
	Preparation for the "Next Step"
	1. Undergraduate Students: Tips for becoming a competitive candidate for Medical School
	2. Medical Students: How to prepare for a career in surgery
	3. Residents: Transitioning from residency to fellowship or practice
10:10-10:15 am	Break
10:15-11:00 am	**Break-out Session:**
	Women in Surgery
	Men in Surgery
11:00-11:15 am	Wrap-up and Closing

Local Program
Sonja Haynes Stone Center, UNC Chapel Hill

Friday April 10, 2015

6:45-7:15 am	Walk or Bus transportation to Sonja Haynes Stone Center, UNC Chapel Hill
7:30-8:00 am	**Opening Remarks and Overview**
	Dr. Andrea Hayes-Jordan – Chair, Program Committee
	Dr. Sean McLean – Local Program Chair
	Dr. Lynt Johnson – President SBAS
	Chancellor Carol L. Folt – Chancellor, UNC Chapel Hill
	Dr. William Roper – Dean, UNC School of Medicine
	Dr. Anthony Meyer – Chair, UNC Department of Surgery
8:00-9:10 am	**UNC Department of Surgery Research Talks**
	1. Moderator and Overview: Dr. Bruce Cairns
	2 Dr. Samuel Jones – "Innate Immune Dysfunction Following Burn and Inhalation Injury in Humans"
	3. Dr. Anthony Charles – "Integrating Global Health Into General Surgery Residency in the U.S.: The UNC Malawi Surgical Initiative"
	4. Dr. Sean McLean – "Vascular Remodeling and Decreased Angiogenesis Lead to Pulmonary Hypertension in a Mouse Model for CDH"
	5. Dr. Raeshell Sweeting – "The Price of Acute Care Surgery"
9:10-9:25 am	Break and Group Photo

Local Program (Cont.)

9:25-10:50 am **LOCAL PROGRAM KEYNOTE SPEAKERS**

Dr. Myron Cohen
Associate Vice Chancellor for Global Health
Yeargen-Bate Distinguished Professor of Medicine, Microbiology and Immunology, and Epidemiology
Chief, Division of Infectious Diseases
"Global Health"

Dr. Oliver Smithies
Weatherspoon Eminent Distinguished Professor
Nobel Laureate – 2007 Physiology and Medicine
"Where Do Ideas Come From?"

10:50-11:50 am **PANEL DISCUSSION: "MENTORING AND CAREER DEVELOPMENT THE UNC WAY"**

Moderator: Dr. Bruce Cairns

Drs. Cedric M. Bright, Giselle Corbie-Smith, David A. Gerber, Paul A. Godley, Benjamin Haithcock, Susan Henning

11:50 am-12:00 pm Walking and Bus transportation back to hotel (where afternoon sessions will occur)

Social Program

Thursday April 9, 2015

5:00-6:30 pm Women in Surgery Reception (Bryan Courtyard/ Sunroom)

6:30-8:30 pm Welcome Reception (Old Well Room)

Friday April 10, 2015

5:45-6:45 pm Buses Depart for the Dean E. Smith Center

7:00-10:30 pm Welcome/Evening Event at the Dean E. Smith Center and UNC Basketball Hall of Fame

Guest Speaker: Mr. Charles Scott

Special Guest: Mr. Phil Ford

Musical Performance By: UNC Harmonyx

Saturday April 11, 2015

4:45-5:30 pm **Presidential Address** – *Lynt B. Johnson, MD*
Carolina Inn, Chapel Hill, North Carolina
(Hill Ballroom)

6:30-7:30 pm Reception (Colonnade)

7:30-11:00 pm Black Tie Dinner/Awards Presentation/Dancing & Entertainment (Hill Ballroom)

Guest Speaker: Omari Hardwick, Actor/Activist

Music Provided by: John Brown Quintet and DJ Qool Marv

Scientific Sessions

Promoting Academic Excellence in Career Development through Mentorship

Friday — April 10, 2015

6:00-6:45 am	Continental Breakfast (Chancellors' Ballrooom)
7:30-8:00 am	Opening Remarks and Speaker Introduction *Drs. Lynt Johnson, Hayes-Jordan, Sean McLean, Anthony Meyer, William Roper*
8:00-9:10 am	LOCAL PROGRAM SPEAKERS
9:10-9:25 am	Break
9:25-10:30 am	LOCAL PROGRAM SPEAKERS
10:30-11:50 am	PANEL DISCUSSION
12:00-1:00 pm	Mentorship Lunch (Alumni Room)
1:00-1:45 pm	**State of the Art Lecture** (Hill Ballroom)
2:00-3:30 pm	**SCIENTIFIC SESSION #1 (PODIUM)** (Hill Ballroom)
3:30-4:30 pm	**SCIENTIFIC SESSION #2 (POSTERS)** (Old Well Room/Club Room)

Scientific Sessions

Promoting Academic Excellence in Career Development through Mentorship

Saturday — April 11, 2015

6:30-7:30 am	Continental Breakfast (Colonnade)
7:45-9:15 am	**SCIENTIFIC SESSION #3 (PODIUM)** (Hill Ballroom)
9:30-11:00 am	**SCIENTIFIC SESSION #4 (PODIUM)** (Hill Ballroom)
12:30-1:25 pm	Mentorship Lunch (Chancellors' Ballroom)
1:25-2:15 pm	**Asa Yancey Lecture**
2:30-4:30 pm	**SCIENTIFIC SESSION #5 (PODIUM)** (Hill Ballroom)
4:45-5:30 pm	**Presidential Address**

Scientific Session 1 (Podium Presentations)

Friday, April 10, 2015
Hill Ballroom, Carolina Inn
2:00-3:20 p.m.

TRAUMA, GENERAL/PEDIATRIC SURGERY

Moderators: Andre Campbell, MD; and Kimberly M. Erickson, MD

2:00pm THE TRUTH ABOUT TRAUMA READMISSIONS
SENIOR AUTHOR: A. Salim; PRESENTER: O. Olufajo

2:10pm READMISSIONS AFTER NON-OPERATIVE MANAGEMENT OF BLUNT SPLENIC INJURY
SENIOR AUTHOR: A. Salim; PRESENTER: G. Freitas

2:20pm TRAUMATIC SPLENIC ARTERY ANEURYSM: AN ANALYSIS OF THE NATIONAL TRAUMA DATABANK
SENIOR AUTHOR: S. Siram; PRESENTER: C. Nembhard

2:30pm EMERGENCY GENERAL SURGERY PATIENTS RECEIVE HIGHER RATES OF TRANSFUSION FOR THE SAME BLOOD LOSS
SENIOR AUTHOR: A. Salim; PRESENTER: W. Do

2:40pm RADIOGRAPHICALLY REDUCED INTUSSUSCEPTION DOES NOT REQUIRE HOSPITAL ADMISSION
SENIOR AUTHOR: C. Gayer; PRESENTER: A. Roberts

2:50pm LONG-TERM OUTCOMES OF SUPERSELECTIVE EMBOLIZATION IN THE TREATMENT OF COLONIC HEMORRHAGE
SENIOR AUTHOR: J. Cohen; PRESENTER: R. Wilson

Scientific Session 1 (Cont.)

3:00pm NECROTIZING ENTERCOLITIS AND THE USE OF LOOP DIURETICS IN VERY LOW BIRTH WEIGHT NEONATES
SENIOR AUTHOR: O. Adibe; PRESENTER: M. Cole

3:10pm PEDIATRIC SURGICAL CARE FOR BOWEL OBSTRUCTION IN MALAWI
SENIOR AUTHOR: S. McLean; PRESENTER: M. Shah

Scientific Session 2 (Parallel Poster Sessions)

Friday, April 10, 2015
Old Well Room, Carolina Inn
3:30-4:30 p.m.

Poster Group 1 EDUCATION AND OUTCOMES

Moderators: Lynn O'Connor, MD; Linda Barry, MD; and Michael O. Meyers, MD

FAILURE MODES AND EFFECTS ANALYSIS: A COMPARISON OF THE EFFECTIVENESS OF TWO SCORING SYSTEMS
SENIOR AUTHOR: J. Holl; PRESENTER: L. McElroy

PILOTING VIRTUAL SURGICAL PATIENT CASES WITH THIRD-YEAR MEDICAL STUDENTS DURING THE SURGERY ROTATION
SENIOR AUTHOR: C. Pugh; PRESENTER: S. Sullivan

DEVELOPMENT OF A CHEST DRAINAGE SIMULATION PROGRAM ADAPTABLE TO RESOURCE-LIMITED SETTINGS
SENIOR AUTHOR: T. Varghese; PRESENTER: S. Oyetunji

INTERROGATING 'UNIVERSAL' HEALTH CARE: A COMPARATIVE ANALYSIS OF SURGICAL COVERAGE IN NATIONAL HEALTH INSURANCE SCHEMES OF LOW-MIDDLE INCOME COUNTRIES
SENIOR AUTHOR: V. Chia; PRESENTER: V. Chia

Poster Group 1 (Cont.)

CLINICIAN PERCEPTIONS OF OR-TO-ICU HANDOFFS AND IMPLICATIONS FOR PATIENT SAFETY: A QUALITATIVE STUDY
SENIOR AUTHOR: J. Holl; PRESENTER: L. McElroy

EVALUATION OF TEACHING EFFECTIVENESS FOR A SIMULATION BASED, CME COURSE: FROM STRUCTURED TO UNSTRUCTURED TEACHING OF COMPLEX LAPAROSCOPIC SKILLS
SENIOR AUTHOR: C. Pugh; PRESENTER: A. D'Angelo

INTRODUCTION AND EARLY RESULTS OF A REGIONAL ANESTHESIA PROGRAM IN BREAST SURGERY
SENIOR AUTHOR: M. Gary; PRESENTER: M. Gary

Scientific Session 2
(Parallel Poster Sessions)

Friday, April 10, 2015

Old Well Room, Carolina Inn

3:30-4:30 p.m.

Poster Group 2
GENERAL SURGERY AND TRAUMA

Moderators: Ayodele Sangosanya, MD; Madison Cuffy, MD; and Sean Montgomery, MD

ASPIRIN, NSAIDS AND OVARIAN CANCER SURVIVAL
SENIOR AUTHOR: S. Smith; PRESENTER: S. Smith

INTRODUCING RANDOM PERI-AREOLAR FINE NEEDLE ASPIRATIONS (RPFNA) IN A PUBLIC HOSPITAL SETTING FOR WOMEN AT INCREASED RISK FOR BREAST CANCER
SENIOR AUTHOR: S. Gabram-Mendola; PRESENTER: Y. Alimi

INJURY SEVERITY SCORE (ISS) AS A PREDICTOR OF PERIOPERATIVE COMPLICATIONS IN OPEN HUMERUS FRACTURES
SENIOR AUTHOR: R. Wilson; PRESENTER: N. Branch

Poster Group 2 (Cont.)

WHATEVER HAPPENS TO TRAUMA PATIENTS WHO LEAVE AGAINST MEDICAL ADVICE?
SENIOR AUTHOR: A. Salim; PRESENTER: O. Olufajo

TRAUMA RECIDIVISM AND PREVENTABLE DEATH
SENIOR AUTHOR: G. Smith; PRESENTER: B. Strong

COMPARISON OF DECOMPRESSIVE CRANIECTOMY OUTCOMES IN STROKE VERSUS TRAUMATIC BRAIN INJURY PATIENTS
SENIOR AUTHOR: D. Fossett; PRESENTER: D. Jackson

EPIDEMIOLOGY OF LAWNMOWER-RELATED INJURIES IN CHILDREN: A TEN YEAR REVIEW (2004-2013)
SENIOR AUTHOR: A. Feliz; PRESENTER: M. Bachier

IVC FILTER PLACEMENT IN HIGH-RISK BARIATRIC PATIENTS: A PART OF THE VTE PREVENTION CONTINUUM
SENIOR AUTHOR: T. Fullum; PRESENTER: S. Layne

Scientific Session 2
(Parallel Poster Sessions)

Friday, April 10, 2015

Club Room, Carolina Inn

3:30-4:30 p.m.

Poster Group 3
BARIATRIC SURGERY

Moderators: Terrence Fullum, MD; and Timothy Farrell, MD

VTE OUTCOMES IN BARIATRIC SURGERY PATIENTS: THE ROLE OF OPERATIVE TIME
SENIOR AUTHOR: T. Fullum; PRESENTER: G. Ortega

FACTORS AFFECTING COMPLETION OF WEIGHT LOSS SURGERY PROGRAM AMONG END-STAGE-RENAL-DISEASE PATIENTS FOR TRANSPLANT CONSIDERATION
SENIOR AUTHOR: O. Ekhaese; PRESENTER: A. Osasonu

Poster Group 3 (Cont.)

OUTCOMES OF SUPER-MORBID OBESE BLACK BARIATRIC SURGERY PATIENTS
SENIOR AUTHOR: T. Fullum; PRESENTER: S. Onyewu

RACIAL DISPARITIES IN ADOLESCENT PATIENTS UNDERGOING BARIATRIC SURGERY
SENIOR AUTHOR: K. Bowen; PRESENTER: K. Bowen

SUCCESSFUL OUTCOMES AFTER BARIATRIC SURGERY IN BLACK PATIENTS
SENIOR AUTHOR: T. Fullum; PRESENTER: C. Emenari

OUTCOMES AFTER BARIATRIC SURGERY IN BLACK MALE PATIENTS
SENIOR AUTHOR: T. Fullum; PRESENTER: G. Ortega

Scientific Session 3
(Podium Presentations)

Saturday, April 11, 2015

Hill Ballroom, Carolina Inn

8:00-9:20 a.m.

BASIC SCIENCE AND OTHER

Moderators: Vincent Reid, MD; and Felicia Williams, MD

8:00am NECROTIZING ENTEROCOLITIS LINKED TO PAUCITY OF BACTERIA IN AN EXPERIMENTAL NEONATAL RAT MODEL
SENIOR AUTHOR: T. Fullum; PRESENTER: J. Lim

8:10am COX-2 INHIBITION SUPPRESSES ENTEROCYTE MIGRATION INDUCED BY UDCA
SENIOR AUTHOR: C. Gayer; PRESENTER: J. Golden

8:20am ENVIRONMENTAL MEDIATED INTESTINAL RESTITUTION
SENIOR AUTHOR: C. Martin; PRESENTER: C. Martin

8:30am EFFECT OF MK-2206 ON AKT AND NOTCH PATHWAYS IN HEPATOCELLULAR CARCINOMA
SENIOR AUTHOR: M. Kunnimalaiyaan; PRESENTER: K. Sokolowski

Scientific Session 3 (Cont.)

8:40am BILE ACIDS MODULATE INTESTINAL CELL PROLIFERATION VIA SRC
SENIOR AUTHOR: C. Gayer; PRESENTER: A. Dossa

8:50am PERIOPERATIVE COMPLICATIONS OF ORIF FOR TRAUMATIC OPEN FEMUR FRACTURES IN THE ELDERLY
SENIOR AUTHOR: R. Wilson; PRESENTER: N. Branch

9:00am OPEN REDUCTION AND INTERNAL FIXATION OF RIB FRACTURES FOR PATIENTS WITH FLAIL CHEST
SENIOR AUTHOR: D. Bonville; PRESENTER: M. Tafen-Wandji

9:10am GERMLINE SUCCINATE DEHYDROGENASE (SDH) B MUTATION STATUS MAY BE ASSOCIATED WITH ADVERSE OUTCOME IN PATIENTS WITH THORACIC PARAGANGLIOMAS
SENIOR AUTHOR: D. Schrump; PRESENTER: T. Upham

Scientific Session 4
(Podium Presentations)

Saturday, April 11, 2015

Hill Ballroom, Carolina Inn

9:45-11:15 a.m.

ONCOLOGIC AND TRAUMA SURGERY

Moderators: Lisa Newman, MD; and Elizabeth B. Dreesen, MD

9:45am LAPAROSCOPIC VERSUS OPEN DISTAL PANCREATECTOMY: TREND TOWARDS STANDARD OF CARE
SENIOR AUTHOR: L. Johnson; PRESENTER: Y. Alimi

9:55am GENDER-BASED DIFFERENCES IN SURVIVAL AMONG PATIENTS WITH LOCALIZED PANCREATIC CANCER
SENIOR AUTHOR: S. Tsai; PRESENTER: J. Miura

Scientific Session 4 (Cont.)

10:05am THE RELATIONSHIP BETWEEN AGE AND PANCREATICO-DUODENECTOMY RESOURCE USE: A VALIDATED PILOT STUDY
SENIOR AUTHOR: L. Johnson; PRESENTER: R. Langan

10:15am SPINDLE CELL MALIGNANCIES OF THE BREAST: A RARE TUMOR REVEALED
SENIOR AUTHOR: A. Willis; PRESENTER: A. Moten

10:25am RACIAL AND GEOGRAPHIC VARIATIONS IN COLD ISCHEMIA TIME: KIDNEY VS. LIVER TRANSPLANTS
SENIOR AUTHOR: J. Melancon; PRESENTER: J. Melancon

10:35am MORTALITY AND END OF LIFE CARE IN OLDER TRAUMA PATIENTS WITH SEVERE TRAUMATIC BRAIN INJURY
SENIOR AUTHOR: Z. Cooper; PRESENTER: G. Freitas

10:45am INDICATIONS FOR INTUBATION AND EARLY TRACHE-OSTOMY IN PATIENTS WITH STEVENS JOHNSON SYNDROME AND TOXIC EPIDERMAL NECROLYSIS
SENIOR AUTHOR: R. Williams; PRESENTER: R. Williams

10:55am THE FORGOTTEN 12%: A CLOSER LOOK AT THE TRENDS OF INTERPERSONAL VIOLENCE AMONG URBAN FEMALES
SENIOR AUTHOR: G. Victorino; PRESENTER: R. Smith

11:05am ABDOMINAL COMPARTMENT SYNDROME IN TRAUMATIC HEMORRHAGIC SHOCK: IS THERE A FLUID RESUSCITATION INFLECTION POINT?
SENIOR AUTHOR: W. Greene; PRESENTER: J. Hwabejire

Society of Black Academic Surgeons
Twenty-Fifth Annual Meeting
Program at a Glance

Scientific Session 5
(Podium Presentations)

Saturday, April 11, 2015
Hill Ballroom, Carolina Inn
2:30-4:20 p.m.

DISPARITIES, EDUCATION AND OUTCOME

Moderators: Wendy Greene, MD; and Darhyl Johnson II, MD

2:30pm INCIDENCE AND RISK FACTORS FOR DVT AND PE FOLLOWING LIVER TRANSPLANTATION
SENIOR AUTHOR: C. Jones; PRESENTER: V. Emuaknagbon

2:40pm METASTASES TO THE ADRENAL GLAND: WHO BENEFITS FROM ADRENALECTOMY?
SENIOR AUTHOR: T. Wang; PRESENTER: J. Glenn

2:50pm PROCEDURAL VOLUME AND SURVIVAL AFTER LUNG TRANSPLANTATION IN THE UNITED STATES: A POST LUNG ALLOCATION SCORE (LAS) ANALYSIS
SENIOR AUTHOR: J. Hayanga; PRESENTER: J. Hayanga

3:00pm DEMOGRAPHICS AND DISPARTITIES IN SUB-STERNAL GOITERS IN THE U.S.: A DISTINCT ENTITY
SENIOR AUTHOR: A. Willis; PRESENTER: A. Moten

3:10pm MINORITY RACE AND LOWER SOCIOECONOMIC STATUS ADVERSELY AFFECT STOMA CLOSURE RATES
SENIOR AUTHOR: D. Tran; PRESENTER: S. Zafar

Scientific Session 5 (Cont.)

3:20pm RACIAL DISPARITIES IN THE TYPE OF POSTMASTECTOMY RECONSTRUCTION CHOSEN
SENIOR AUTHOR: L. Guo; PRESENTER: A. Offodile

3:30pm INSURANCE STATUS OF CADAVERIC ORGAN DONORS
SENIOR AUTHOR: E. Chan; PRESENTER: J. Cull

3:40pm THE DIVERSE SURGEONS' INITIATIVE (DSI): LONGITUDINAL ASSESSMENT OF A SUCCESSFUL NATIONAL PROGRAM
SENIOR AUTHOR: T. Fullum; PRESENTER: P. Butler

3:50pm MULTI-MORBIDITY AND ACCESS TO MAJOR CANCER SURGERY AT HIGH-VOLUME HOSPITALS IN A REGIONALIZED ERA
SENIOR AUTHOR: C. Ihemeland; PRESENTER: C. Ihemeland

4:00pm MORBID OBESITY IS AN INDEPENDENT RISK FACTOR FOR POSTOPERATIVE RENAL DYSFUNCTION IN YOUNG ADULTS: A REVIEW OF THE ACS-NSQIP DATABASE
SENIOR AUTHOR: C. Calder; PRESENTER: C. Calder

4:10pm MEDICAID BENEFICIARIES UNDERGOING COMPLEX SURGERY AT QUALITY CARE CENTERS: INSIGHTS INTO THE AFFORDABLE CARE ACT
SENIOR AUTHOR: W. Al-Refaie; PRESENTER: E. Hall

Dr. Claude H. Organ, Jr. Resident Award

Claude H. Organ, Jr., MD, FACS (1926-2005) was a world renowned academic surgeon, a giant in the field of surgery and medicine, and a major force in shaping and supporting the lives and careers of thousands. In 1989, Dr. Organ and several other black academic surgeons founded SBAS and held its first meeting at Duke University. Throughout his career, he oversaw the training of dozens of surgeons, including several African-American women. His lifelong dedication to mentoring young surgeons and encouraging diversity in the field of surgery is represented in the annual Dr. Claude H. Organ, Jr. Resident Award.

Delos "Toby" Cosgrove, MD, President & CEO, Cleveland Clinic, committed the Cleveland Clinic's endowment of this prestigious award. Starting in 2008 and continuing into the subsequent years, Cleveland Clinic's sponsorship of the Dr. Claude H. Organ, Jr. Resident Award helps insure the success of the future generations of surgeons.

Dr. Claude H. Organ, Jr. Resident Award Winners

2003 **Richard E. Redlinger, Jr., BS**
Children's Hospital of Pittsburgh

Donn H. Spight, MD
University of Cincinnati

2004 **Zara R. Cooper, MD, MSc**
Brigham and Women's Hospital

2005 **Sonya Walker, MD**
University of Pittsburgh

Dr. Claude H. Organ, Jr. Resident Award Winners (cont.)

2006 **Stephen H. Gray, MD**
University of Alabama at Birmingham

Georgia Holder-Haynes, MD
Texas A&M University

2007 **Sylvester Black, MD [1st Place]**
University of Minnesota

Sha-Ron Jackson, MD [2nd Place]
University of Cincinnati

2008 **Jeanwan Kang, MD [1st Place]**
Massachusetts General Hospital

Darrell L. Hunt, MD [2nd Place]
University of Florida

2009 **Kelley Chuang, MD [1st Place]**
University of California, San Francisco

Sha-Ron Jackson, MD [2nd Place]
Children's Hospital Los Angeles

Paris D. Butler, MD [3rd Place]
University of Virginia / Stanford University

2010 **Briana Leung, MD [1st Place]**
University of California, San Francisco

Jennifer Timmons, MD [2nd Place]
University of Maryland Medical Center

Elizabeth M. Pontarelli, MD [3rd Place]
Children's Hospital Los Angeles

Dr. Claude H. Organ, Jr. Resident Award Winners (cont.)

2011 **Chandler A. Long, MD [1st Place]**
University of Tennessee

Leonard H. Armstrong, MD [2nd Place]
University of Minnesota

Tahira Prendergast, MD [3rd Place]
Howard University Hospital

2012 **Marcus D. Darrabie, MD [1st Place]**
Duke University Medical Center

Shannon L. Castle, MD [2nd Place]
Children's Hospital Los Angeles

Elizabeth M. Pontarelli, MD [3rd Place]
Children's Hospital Los Angeles

2013 **Christa Grant, MD [1st Place]**
Saban Research Institute at Children's Hospital Los Angeles

Randi Smith, MD [2nd Place]
University of California-San Francisco

Stephanie Papillon, MD [3rd Place]
Children's Hospital Los Angeles

2014 **Stephanie Papillon, MD [1st Place]**
Children's Hospital Los Angeles

Michael Phillips, MD [2nd Place]
University of North Carolina Hospitals

Shakirat Oyetunji [3rd Place]
National Institutes of Health

Scientific Session Moderators

Linda K. Barry, MD – Assistant Professor, University of Connecticut Health Center

Andre R. Campbell, MD – Professor, University of California, San Francisco

Madison Cuffy, MD, MBA – Assistant Professor, University of Cincinnati

Elizabeth B. Dreesen, MD – Associate Professor, University of North Carolina at Chapel Hill

Kimberly M. Erickson, MD – Assistant Professor, University of North Carolina at Chapel Hill

Timothy M. Farrell, MD – Professor, University of North Carolina at Chapel Hill

Terrance Fullum, MD – Professor, Howard University College of Medicine

Wendy Ricketts-Greene, MD – Assistant Professor, Howard University College of Medicine

Darhyl Johnson II, MD – Assistant Professor, University of North Carolina at Chapel Hill

Lisa A. Newman, MD, MPH – Professor, University of Michigan

Lynn M. O'Connor, MD – Assistant Professor, Hofstra University School of Medicine

Michael O. Meyers, MD – Professor, University of North Carolina at Chapel Hill

Sean P. Montgomery, MD – Assistant Professor, University of North Carolina at Chapel Hill

Vincent J. Reid, MD – Clinical Assistant Professor, University of Iowa Hospitals & Clinics

Ayodele T. Sangosanya, MD – Assistant Professor, University of Rochester School of Medicine & Dentistry

Felicia Williams, MD – Assistant Professor, University of North Carolina at Chapel Hill

ASA Yancey Lecture

The Honorable Jonathan Woodson, MD
Assistant Secretary of Defense for Health Affairs,
United States of America
"To Be Determined"

State of the Art Lecture

Anthony A. Meyer, MD, PhD
Colin G. Thomas Distinguished Professor of Surgery
& Chair, Department of Surgery,
University of North Carolina - Chapel Hill
"Making a Difference"

Guest Speakers

Dr. Myron Cohen
Associate Vice Chancellor for Global Health
Yeargen-Bate Distinguished Professor of Medicine,
Microbiology and Immunology, and Epidemiology
Chief, Division of Infectious Diseases
"Global Health"

Dr. Oliver Smithies
Weatherspoon Eminent Distinguished Professor
Nobel Laureate 2007 – Physiology and Medicine
"Where Do Ideas Come From?"

Mr. Charles Scott
UNC Basketball / US Olympian
First African American Basketball Player in the ACC
"Mentoring Through Sports"

Mr. Omari Hardwick
Actor/Activist

ABSTRACTS

#1

THE TRUTH ABOUT TRAUMA READMISSIONS

O.A. Olufajo, Z.R. Cooper, J.M. Havens, R. Askari, B.K. Yorkgitis, G.A. Brat, A. Salim.
Brigham and Women's Hospital, Boston, MA

Introduction: Although efforts to reduce overall healthcare costs include strategies to reduce readmissions, there is a paucity of data on the factors that are associated with readmission following traumatic injuries.

Objective: To determine the associated patient factors and causes for unplanned readmissions among trauma patients.

Methods: Using ICD-9 diagnosis codes in the California State Inpatient Database, we selected adult patients (age 18-64) admitted for traumatic injuries between 2007 and 2011. Data regarding age, sex, race, insurance type, Charlson Co-morbidity Index (CCI) derived from comorbidities, complications, injury severity score, body region with maximum severity, and discharge disposition were collected or calculated. We calculated the rate of readmission from 30 days after the date of discharge. Using multivariate logistic regression models, we determined the patient factors associated with 30-day readmissions. We also characterized the reasons for readmissions into categories and calculated proportions of patients readmitted for each category.

Results: There were 269,357 trauma admissions included in our analyses. The study population was predominantly male (67%), white (58%), and had a mean age of 42 years. The overall readmission rate was 7.5%, with 36% of readmissions occurring at a hospital different from the hospital of initial admission. Major predictors of readmissions included being discharged against medical advice [OR: 2.56(2.35-2.76)]; CCI $\geq$2 [OR: 2.00(1.91-2.10)]; age $\geq$45 [OR: 1.29(1.25-1.33)] and being on Medicare [OR: 1.16(1.09-1.22)]. Major reasons for readmissions included: musculoskeletal complaints (24.2%), procedural complications (13.2%), infections (9.1%), and psychiatric conditions (7.1%).

Conclusion: Patients' underlying health and social vulnerabilities increase the risk for readmissions after trauma, and many readmitted patients go to other hospitals. Better understanding of factors that influence unplanned readmissions is critical to reducing readmissions for trauma centers.

#2

READMISSIONS AFTER NON-OPERATIVE MANAGEMENT OF BLUNT SPLENIC INJURY

G. Freitas, O.A. Olufajo, Z. Cooper, J. Havens, R. Askari, A. Salim.
Brigham and Women's Hospital, Boston, MA

Introduction: Non-operative management (NOM) of blunt splenic injuries has become the standard of care in appropriately selected patients. There is a paucity of data regarding the short-term outcomes of these patients once they are discharged from the hospital.

Objective: To evaluate short-term outcomes of NOM blunt splenic injuries.

Methods: We reviewed the California State Inpatient Database using ICD-9 diagnosis codes to identify adult patients who were admitted for isolated blunt splenic injuries (2007-2011). Variables included age, sex, race, insurance status, grade of splenic injury, Charlson Comorbidity Index (CCI), discharge disposition, complications, and in-hospital mortality. Outcomes included 30 day readmission and operative intervention upon readmission. Using multivariate logistic regression models, we determined the patient factors associated with 30-day readmissions in both groups.

Results: A total of 4,701 patients met inclusion criteria; with 66% in NOM and 33% in OM groups. The readmission rates were 7.58% vs. 10.17% ($p<0.003$) in the NOM vs. OM groups respectively. Independent factors associated with readmission in the NOM group included CCI ≥ 2 (Odds Ratio:1.76; 95% Confidence Interval:1.02-3.02); age ≥ 45 (1.85;1.39-2.45), being discharged against medical advice (2.68;1.48-4.84) and having public insurance (1.68;1.16-2.42). 19% of patients readmitted required an operative intervention. Interestingly, 40% of this group were readmitted to a different hospital.

Conclusion: Patients who were managed non-operatively had a lower rate of readmission compared to those managed operatively. Nearly 20% of those readmitted required an operative intervention. Of concern, 40% were admitted to a different hospital from the initial hospital of presentation. This may influence the true incidence of failed NOM rates for splenic injuries.

#3

TRAUMATIC SPLENIC ARTERY ANEURYSM: AN ANALYSIS OF THE NATIONAL TRAUMA DATA BANK

C.E. Nembhard, J.O. Hwabejire, A.C. Obirieze, T.A. Oyetunji, E.E. Cornwell, W.R. Greene, S.M. Siram.
Howard University Hospital, Washington, DC

Introduction: Traumatic splenic artery aneurysm is a potentially life threatening but infrequently studied condition, the majority of data being limited to case reports and series from single institutions. We evaluated the subject using the largest trauma database available.

Methods: The National Trauma Data Bank (NTDB) 2002-2006 was queried. Using the ICD-9 code 442.83, all patients aged ≥ 18 with a primary diagnosis of splenic artery aneurysm were identified. Data on demographics, injury severity and mechanism, pre-existing comorbid conditions, associated injuries, and surgical interventions were analyzed. The major outcome variables were in-hospital complications and mortality.

Results: A total of 124 patients were included, with a mean age of 40±13, 72% were male, and 71% were White. The mean Injury Severity Score (ISS) was 24±12, with 49% of patients having an ISS$\geq$25. All patients suffered from blunt injuries, the commonest mechanism being motor vehicle crash (69%). About 18% of patients (n=22) had associated traumatic brain injury, and 5% of patients (n=6) had an ED systolic BP<90 mmHg. Hypertension requiring medication (14%) and congestive heart failure (5%) were the most frequent comorbidities. About 1.7% of subjects developed pulmonary collapse and the same percentage (1.7%) became dependent on mechanical ventilation. For all comers, mean length of hospital stay (LOS) was 5 days and in-hospital mortality was 1.6%. However, mean LOS was 13 days for survivors. The most frequent interventions performed were Surgical Occlusion of Abdominal Arteries (45%), Endotracheal Intubation (43%), Excisional Debridement of Wound (40%), Bronchoscopy (35%), Other Endovascular Procedures (27%), Insertion of Intercostal Catheter Drainage (25%), and Total Splenectomy (27%).

Conclusion: Traumatic splenic artery aneurysm has a relatively low mortality. The commonest associated morbidity is pulmonary. A significant proportion of affected patients require surgical and/or endovascular intervention for the aneurysm and specific, invasive pulmonary interventions which could be explained by the anatomic proximity of the spleen and lung. A high index of suspicion for splenic artery aneurysm in any patient with significant post-traumatic pulmonary dysfunction is appropriate.

NOTES

#4

EMERGENCY GENERAL SURGERY PATIENTS RECEIVE HIGHER RATES OF TRANSFUSION FOR THE SAME BLOOD LOSS

W. Do, J. Havens, H. Kaafarani, T. Mesar, G. Reznor, Z. Cooper, R. Askari, A. Salim.
Brigham and Women's Hospital and Massachusetts General Hospital, Boston, MA

Introduction: Morbidity and mortality (M&M) rates are exceedingly high among emergency general surgery (EGS) patients, but the underlying cause is unclear. Blood product transfusions are known to carry significant risks.

Objective: To identify differences in transfusion practices between EGS and non-emergency general surgery (NEGS).

Methods: The American College of Surgery National Surgical Quality Improvement Program (ACS-NSQIP) database contained 1073 patients who underwent one of 14 procedures common to EGS and NEGS from 2008-2012 at two academic medical centers. Demographics and post-operative complications were obtained. Exclusion criteria were massive transfusion, autologous blood transfusion, pre-operative hematocrit <24 or international normalized ratio >1.5. Intra-operative packed red blood cell (PRBC) use, fresh frozen plasma (FFP) use, and estimated blood loss (EBL) were collected by chart review. The primary outcome was blood product use. High FFP use was defined as FFP:PRBC >1:1.5.

Results: Of 1073 patients, 732 (68.2%) were NEGS and 341 (32.8%) were EGS. Unadjusted mortality was 3.4% for NEGS vs. 15.5% for EGS ($p<.0001$). Of those transfused any FFP or PRBC (n=123), mortality was 8.7% for NEGS vs. 29.6% for EGS ($p=.0026$); and major complication rate was 33.3% for NEGS vs. 59.3% for EGS ($p=.0041$). High FFP use occurred in 4.3% of NEGS vs. 16.7% of EGS ($p=.0223$). Of those transfused PRBC (n=118), the mean PRBC units transfused for every 300cc of EBL was 0.67 for NEGS vs. 1.13 for EGS ($p=.0028$).

Conclusion: In this selective group without pre-surgical indication for transfusion, EGS patients had greater exposure to transfusion for the same blood loss, putting them at increased risk of transfusion-related complications. Further work is ongoing to determine if this discrepancy in transfusion practices may explain the increased M&M of EGS.

Notes

#5

RADIOGRAPHICALLY REDUCED INTUSSUSCEPTION DOES NOT REQUIRE HOSPITAL ADMISSION

A. Roberts, K. Bowen, R. Burke, J. Stein, C. Gayer.
Children's Hospital Los Angeles, Los Angeles, CA; and Nemours Children's Clinic, Jacksonville, FL

Purpose: Management of ileocolic intussusception post-hydrostatic or pneumatic reduction often involves admission, since recurrence typically occurs within 48 hours. A new protocol at our institution was implemented in February 2014 that eliminates routine admission and discharges patients 2-4 hours after nonsurgical reduction, provided they are afebrile, tolerating liquids, and have no tachycardia or abdominal pain. We hypothesize that this protocol is safe and reduces hospital costs.

Methods: We conducted a retrospective review of patients presenting with intussusception from April 2013 to September 2014, before and after the new protocol implementation. Outcomes measured included recurrence rates, length of stay, and adverse outcomes. Patients requiring surgery at first presentation were eliminated. Chi-square and Student's t-tests were used for analysis, as appropriate.

Results: We identified 61 patients treated for intussusception, including 35 patients treated with the old protocol and 26 patients with the new. Mean age for both protocols was 1.4 years. Recurrence rates were similar in the old protocol (8.6%, n=3) and the new protocol (15.4%, n=4, $p=0.45$), and all were successfully treated non-operatively. All old protocol recurrences were seen >24 hours after reduction. While recurrences under the new protocol were all seen in the outpatient setting, half of these patients recurred within 24 hours. Both returned to the hospital and were treated with repeat nonsurgical reduction without adverse outcomes. The average length of stay was 25.7 hours for patients admitted after successful reduction under the old protocol, and 4.1 hours for patients sent home under the new protocol ($p<0.01$), translating to a cost difference of approximately $2,000/patient.

Conclusion: Discharging patients that meet strict clinical criteria after a 2-4 hour observation period following radiographic reduction of ileocolic intussusception is safe and cost-saving. However, families must still be educated about recurrence. Shorter hospital observation does not appear to lead to adverse events, although larger trials are ongoing.

NOTES

#6

LONG-TERM OUTCOMES OF SUPERSELECTIVE EMBOLIZATION IN THE TREATMENT OF COLONIC HEMORRHAGE

R. Wilson, C.C. Jadlowiec, M.J. Thielman, M. Hallisey, J.L. Cohen.
University of Connecticut, Farmington, CT; and Hartford Hospital, Hartford, CT

Introduction: Historically, colonic hemorrhage has been treated through the combined use of localization studies and surgical intervention. Attempts to treat acute hemorrhage via embolization were complicated by intestinal ischemia requiring surgical resection. The introduction of superselective embolization, however, greatly changed the manner in which we today approach colonic bleeding. This is a follow-up study evaluating our institution's long-term outcomes using angiographic methods as the primary modality for the treatment of colonic bleeding. Primary outcomes include (1) superselective embolization efficacy, (2) observed colonic ischemia post-embolization, and (3) long-term success in circumventing re-bleeding.

Methods: This 9-year (1/1/2004-12/31/2013) single-center retrospective case series evaluated outcomes of patients who underwent embolization attempts for treatment of colonic hemorrhage. This study was approved by the Hartford Hospital Institutional Review Board.

Results: Average patient age was 75.71±14.3. Diverticulosis was the most commonly identified etiology responsible for colonic bleeding (68%). Thirty-percent of patients underwent successful superselective embolization. Twelve-percent of patients required a surgical intervention; 4% of surgical interventions occurred as a result of intestinal ischemia following embolization ($p=0.1250$); 16% of patients went on to have future episodes of colonic bleeding requiring hospital readmission

Conclusion: No significant difference was observed between the number of surgical interventions required for patients who were not successfully embolized versus patients who were embolized and went on to develop ischemia. Our nine-year experience finds superselective embolization to be efficacious in the treatment of colonic bleeding, with minimal associated morbidity.

#7

NECROTIZING ENTEROCOLITIS AND THE USE OF LOOP DIURETICS IN VERY LOW BIRTH WEIGHT NEONATES

M.A. Cole, C. DeRienzo, M. Kutchibhatla, C.M. Cotten, O.O. Adibe.
University of North Carolina, Chapel Hill, NC; and Duke University, Durham, NC

Background: Necrotizing enterocolitis (NEC) is a gastrointestinal disease of premature, very low birth weight (VLBW) neonates resulting in bowel necrosis, sepsis, and death. The incidence and mortality of NEC is inversely proportional to gestational age and birth weight. Loop diuretics are widely utilized in neonates as a treatment for pulmonary fluid retention secondary to bronchopulmonary dysplasia, respiratory distress syndrome, and non-pulmonary causes of respiratory failure. Diuretics may result in decreased mesenteric perfusion, which may increase the risk of NEC. An association between diuretic use and NEC has not been explored.

Methods: After IRB approval, the medical records of all neonates admitted to Duke Children's Hospital between 2007 and 2012 with a birth weight ≤1500 grams were reviewed. Patients with a diagnosis of NEC were designated as cases; patients without the diagnosis of NEC were designated as controls.

Results: We reviewed 484 patient charts (cases = 72, controls = 332). Using multivariable logistic regression analysis, we found that loop diuretic administration was not a risk factor for the development of NEC (AOR 0.998; 95% CI 0.42, 2.35). On sub-analysis, 75% of medical NEC infants had prior exposure to loop diuretics, compared to 100% of surgical NEC infants (p = 0.004).

Conclusions: Examination of this single institution dataset has shown that loop diuretics do not increase the risk of development of NEC in VLBW neonates. However, upon diagnosis of NEC, administration of loop diuretics may be associated with the progression of NEC severity from medical NEC to surgical NEC. A larger sample size may be necessary to validate these findings.

Notes

#8

PEDIATRIC SURGICAL CARE FOR BOWEL OBSTRUCTION IN MALAWI

M. Shah, J. Gallaher, S.E. McLean, A.G. Charles.
University of North Carolina, Chapel Hill, NC

Introduction: Bowel obstruction (BO) is a common pediatric surgical emergency in sub-Saharan Africa (SSA), with high morbidity and mortality. Patterns vary by age and region, and little is known about the etiology and outcome in the pediatric patient population in Malawi.

Objective: To investigate the etio-pathogenesis of BO in children in Malawi and in-hospital outcome.

Methods: We conducted a retrospective analysis of a pediatric surgery database, collected from Feb. 2012 to June 2014, at Kamuzu Central Hospital in Lilongwe, Malawi (n=3,407). The portion of pediatric patients with an initial or discharge diagnosis of BO underwent analysis (n=130).

Results: 74 (57%) patients were male and 56 (43%) female with a mean age of 3.5 $\pm$ 4.1 years; 67 (52%) underwent operative intervention. Mean time from presentation to operative intervention was 6.4 $\pm$ 10.2 days. Mean hospital length of stay (LOS) was 12.3 $\pm$ 13.9 days. Congenital and acquired causes of BO accounted for 54 (41%) and 57 (44%) in our cohort, respectively. Leading causes of BO were Hirschsprung's, 25 (29%), imperforate anus, 24 (18%), intussusception, 5 (4%), hernia, 5 (4%), and appendicitis, 4 (3%). The overall mortality rate was 3%, compared to 0.44% in the entire pediatric surgery database. Those with congenital causes had a lower rate of surgery, 42% vs. 58%, and had a lower rate of mortality, 0% vs. 5%, respectively. There was a lack of diagnostic testing, with only 23 patients receiving imaging studies, all x-rays. 22% of patients had differing admission and discharge diagnoses, with appendicitis, intussusception, and hernias most commonly misdiagnosed.

Conclusion: BO is a significant source of pediatric surgical disease in SSA with higher mortality with associated delays in operative intervention and increase in hospital LOS in both congenital and acquired causes. This is due in part to a lack of diagnostic adjuncts leading to diagnostic delays and misdiagnoses, in addition to the dearth of a surgical workforce with pediatric surgical training. Efforts to increase pediatric surgical education and training to general surgeons, as well as expanding diagnostic capabilities and capacity in resource poor medical communities, are vital to ameliorate the increased mortality following BO in SSA.

Notes

#9

FAILURE MODES AND EFFECTS ANALYSIS: A COMPARISON OF THE EFFECTIVENESS OF TWO SCORING SYSTEMS

L.M. McElroy, R. Khorzad, A.P. Nannicelli, A.R. Brown, D.P. Ladner, J.L. Holl.
Northwestern University Feinberg School of Medicine, Chicago, IL

Introduction: Failure mode and effects analysis (FMEA) is a proactive method of risk assessment widely used in manufacturing and increasingly used in healthcare over the past decade. FMEA involves assembling a multidisciplinary team, graphically mapping out a high-risk process, and systematically examining each step within the process for potential breaches leading to failure. Identified failures are then ranked by risk of patient harm using a 10-point scoring system.

Objective: To test the ability of a simplified scoring system to prioritize failures compared to the traditional 10-point, quantitative scoring system.

Methods: FMEA was conducted of the operating room (OR) to intensive care unit (ICU) handoff. Risk prioritization scores were assigned to each failure mode based on clinician report of actual and perceived risk for harm using both prioritization scoring systems: (1) the traditional 10-point, quantitative system (1-low risk to 10-high risk) and (2) a simplified qualitative system.

Results: In total, 79 failure modes were identified among 37 individual steps in the OR-to-ICU handoff process. The simplified scoring system identified 11 failures as "low risk," 30 failures as "medium risk," and 22 failures as "high risk." The 10-point quantitative scoring system had scores from 80-504: 39 failures had an RPN < 300 and 24 failures had an RPN ≥ 300. Of these 24 failures, 22 were identified as "high risk" by the simplified scoring system, resulting in 92% agreement between the two systems in identifying high-priority failures.

Conclusion: These results suggest that a simplified scoring system can be an effective method of risk prioritization in FMEA. The congruence between the two systems suggests that a simplified scoring system can identify high-risk failures, but it may not allow for more discriminating prioritization offered by the traditional FMEA 10-point scoring system.

#10

PILOTING VIRTUAL SURGICAL PATIENT CASES WITH THIRD-YEAR MEDICAL STUDENTS DURING THE SURGERY ROTATION

S.A. Sullivan, E. Bingman, A. O'Rourke, C. Pugh.
University of Wisconsin, Madison, WI

Introduction: Virtual Surgical Patient Cases (VPC) by *discourse*^{LLC} are web-based cases made to help students develop clinical decision making and diagnostic skills using simulated patient scenarios.

Objective: To understand how 3rd-year medical students used VPC as a low-risk environment for learning during their surgical rotation.

Methods: 50 students used a case on Acute Diverticulitis to engage in a scenario about a 64-year-old female presenting to the emergency room with left lower quadrant pain and fever. The VPC software tracked students' choices during diagnosis/treatment and assigned them either a positive or negative score (max 100) depending on the errors made. Students lose points for making incorrect decisions of commission or omission. Cases can be repeated multiple times.

Results:

Group	Mean Score	SD
All first attempts	41.34	32.56
Completed case more than once	87.75	16.82
Completed case one time	53.56	34.40
All final attempts	75.44	29.40

Despite automated feedback received after their first attempt, students who completed the case additional times still made errors in failure to administer IV antibiotics, their choice of procedure, amount of time before taking to the OR, and failure to check vital signs and do an abdominal exam after hospital admission.

Conclusion: The VPC software helped students to identify errors in their decision making. Faculty found the decision reports useful for understanding trends in students' decision making and potential knowledge deficits in order to target instruction and case discussion.

#11

DEVELOPMENT OF A CHEST DRAINAGE SIMULATION PROGRAM ADAPTABLE TO RESOURCE-LIMITED SETTINGS

S. Oyetunji, A. Morris, J. Ilgen, A. Bekele, A. Tadesse, B. Kotisso, S. Kima, A. Wright, B. Oelschlager, T.K. Varghese Jr.
University of Washington, Seattle, WA; and Addis Ababa University School of Medicine, Addis Ababa, Ethiopia

Background: Chest drainage procedures are widely used in the management of intrathoracic pathology and medical errors during these procedures contribute to significant patient morbidity. Our aim was to create a curriculum for the standardization of chest drainage procedures for surgical trainees that could also be adapted for resource-limited environments.

Methods: This simulation program was developed as a multidisciplinary effort to standardize thoracic procedure training among medical and surgical trainees. It consists of four modules: 1) surgical chest tube insertion, 2) thoracentesis, 3) Seldinger technique percutaneous chest drain placement, and 4) thoracic ultrasound for procedure guidance. The surgical tube thoracostomy component consists of a comprehensive curriculum with an online video orientation that reviews the indications, contraindications, preparation and technique for chest tube placement. This is then followed by a 4-hour hands-on training in the simulation lab. Each session was proctored by surgical and internal medicine attending physicians with assistance from cardiothoracic surgery fellows. The surgical chest tube insertion module was also piloted as part of a basic surgical skills simulation course offered to incoming surgical residents in a resource-limited country. Adaptations for the resource-limited country included use of animal models instead of the anatomical surgical manikins used in our institution; the workshop was conducted in collaboration with local attending surgeons and a cardiothoracic surgery fellow.

Results: 140 novice trainees successfully completed the program at our institution, 88 of whom were surgical residents. Evaluations completed by trainees demonstrated an increase in trainee confidence in performing these procedures, and nearly all of the participants felt this was a valuable addition to their training.

An additional 34 residents completed the tube thoracostomy module in the resource-limited country, and it was informally reported to be a great learning experience for the trainees.

Conclusions: Surgical simulation is a feasible educational technique into resource-limited settings. Our curriculum demonstrates that with appropriate adjustments, a training curriculum can be designed that is applicable in both developed and resource-limited environments. Future directions include validation and standardization of the training program in a multi-institutional, multi-disciplinary competency-based curriculum.

Notes

#12

INTERROGATING 'UNIVERSAL' HEALTH CARE: A COMPARATIVE ANALYSIS OF SURGICAL COVERAGE IN NATIONAL HEALTH INSURANCE SCHEMES OF LOW-MIDDLE INCOME COUNTRIES

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Introduction: Universal health coverage (UHC) is a means of health systems strengthening in developing countries. The global burden of disease is shifting towards cancer and chronic diseases, many of which are surgically treatable. Surgical care is a major cost driver of health care expenditures worldwide.

Objective: To provide a comparative analysis of achievement of height, breadth, and depth of coverage of surgical conditions in low-middle income countries (LMICs) with UHC schemes, and to identify barriers in achieving these dimensions.

Methods: We reviewed WHO, World Bank, Joint Learning Network, and national health insurance policy documents. We systematically searched PubMed and Google Scholar for articles published between January 1991 and November 2013 in English, Spanish, or French using pre-specified inclusion and exclusion criteria. Keywords included insurance, out-of-pocket payment, surgery, trauma, and cancer.

Results: In addition to policy documents, we found 696 articles and selected 265 for full-text review. Most countries mention surgery broadly; some countries listed surgical conditions in detail (e.g. India, 947 conditions). Obstetric care is most commonly covered. Solid organ transplantation is least commonly covered. Cancer care is mentioned broadly without specifying therapeutic modality. Out-of-pocket-payments (OPP) rates are catastrophic for most countries, limiting *de facto* access to surgical services due to inadequate cost-sharing.

Conclusion: Many LMICs include surgery in their UHC operating plans. Coverage varies widely in terms of cost-sharing, proportion of population enrolled, and range of services covered. High OPP remain a fundamental challenge to providing surgical care in LMICs.

Notes

#13

CLINICIAN PERCEPTIONS OF OR-TO-ICU HANDOFFS AND IMPLICATIONS FOR PATIENT SAFETY: A QUALITATIVE STUDY

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Introduction: Patient handoffs are a persistent source of adverse events. Prior interventions targeting the handoff process have shown limited effectiveness in reducing patient harm.

Objective: To use qualitative methods to describe clinician perceptions of aspects of OR-to-ICU handoff associated with high quality as well as aspects that may lead to patient harm.

Methods: Risk assessment interviews were conducted with clinicians involved in the OR-to-ICU handoff of liver transplant patients. The semi-structured interview evaluated the importance, validity, clarity, and relevance of 38 attributes of the OR-to-ICU handoff. The unstructured risk assessment interview sought to identify process failures in the handoff that led to patient harm. Thematic analysis was used to inductively identify key themes.

Results: A total of 22 cognitive interviews and 13 risk assessment interviews were conducted with liver transplant surgeons and fellows, trauma/critical care surgeons and fellows, transplant anesthesiologists, anesthesia residents, surgical ICU nurses, and surgical residents. Dominant themes identified include the importance of early communication from the OR to the ICU, issues of equipment malfunction, adequacy of team member participation in the handoff, and culture/relationships. Clinician perspectives varied depending substantially on role within the team.

Conclusion: Disorganized clinician-clinician communication and conflicting expectations of team members during the OR-to-ICU handoff can increase risk of patient harm. Insight gained through the use of multiple clinician perspectives informs how the handoff process can be improved. Future studies should investigate early postoperative ICU care as a marker of handoff quality, and the effect of inter-professional education on clinician participation in and expectations of the handoff.

#14

EVALUATION OF TEACHING EFFECTIVENESS FOR A SIMULATION-BASED, CME COURSE: FROM STRUCTURED TO UNSTRUCTURED TEACHING OF COMPLEX LAPAROSCOPIC SKILLS

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Objective: This study involved comparative course evaluations for a newly developed, simulation-based, CME course for laparoscopic hernia repairs.

Methods: Following a program evaluation for the 2011 hernia course, we hypothesized that unstructured teaching may improve course evaluations. In 2013, unstructured teaching was facilitated by increasing the number of course instructors and allowing use of operative videos as teaching aids. Course instructors (N=21) and post-graduate learners (N=31) were observed and analyzed for differences in teaching approach and instructor-learner behaviors.

Results: Half the instructor teams (5/10) started with hands-on teaching for learner Group 1, while the other half started with verbal instruction. 70% of instructor teams changed their initial teaching approach with the second learner group (Group 2). Additionally, 70% of instructor teams used verbal instruction as their dominant training method with Group 1. This practice decreased to 50% for learner Group 2 with more instructors adopting hands-on demonstration. Use of videos also varied from Group 1 to Group 2. Overall, there was a high level of engagement and a notable prevalence of side-bar instructor-learner conversations.

Post-course evaluations reveal a mean instructor rating of 4.45/5.0 (SD=0.08) with 81% stating the learning objectives were accomplished. Comparatively, the 2011 course evaluations showed a mean instructor rating of 3.13/5.0 (SD=0.99), $p<0.05$ and a lower number of learners (75%) stating the learning objectives were met.

Conclusion: Despite faculty overlap from the 2011 course, post-graduate learners gave higher ratings in 2013 for the unstructured teaching approach. The addition of video-based instruction and side-bar conversations appear to be related to improved course evaluations and should be considered for other CME level skills courses.

Notes

#15

INTRODUCTION AND EARLY RESULTS OF A REGIONAL ANESTHESIA PROGRAM IN BREAST SURGERY

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Introduction: Oncologic surgery has been associated with the release of neoplastic cells into lymphatic and systemic circulation for multifactorial reasons which include the upregulation of stress-related genes, use of general anesthesia and opioid analgesia. Regional anesthesia is widely known to mitigate the surgical stress response through a myriad of different mechanisms. July 2010 marked the start of regional anesthesia for breast cancer surgery at Medstar Washington Hospital Center. The overarching aim of the study was to evaluate any effect of regional anesthesia coupled with general or MAC anesthesia on the effects of breast cancer recurrence. A pilot study was initiated to evaluate early challenges and patient outcomes.

Methods: A retrospective review of 129 patients who underwent either lumpectomy or mastectomy between July 2010 and Dec 2011 was performed. This time period was selected 1) as the sentinel year of the program, and 2) to allow for follow-up data. All lumpectomy patients were offered paravertebral block and all mastectomy patients were offered epidural analgesia. Regional anesthesia was augmented with either general or MAC anesthesia, at the discretion of the anesthesiologist. The primary endpoints were postoperative pain, nausea and time to discharge home. Secondarily, recurrence (defined as either local or distant recurrence) was evaluated.

Results: At a median follow-up of 25 months (range 3-37 months), there were a total of 7 recurrences (3 local and 4 distant). Of these recurrences, 5 had general anesthesia alone, 1 had regional plus general anesthesia and 1 had regional plus MAC anesthesia. These findings were not significant ($p = 0.338$). There was no significance in postoperative nausea comparing anesthesia type received ($p = 0.991$).

Time to discharge did not reach significance (p=0.051), although MAC + local or regional (paravertebral) block displayed a trend toward early discharge and higher patient satisfaction. There was a significant effect seen for type of anesthesia given with postoperative pain (p=0.020) with local and regional (paravertebral) block demonstrating superiority.

Conclusions: This data compiles the first year and a half of patients after introducing regional anesthesia for breast surgery. There was no difference in recurrence rates or postoperative nausea regardless of anesthetic given. However, regional anesthesia did improve postoperative pain and decreased recovery time to home. A larger number of patients are needed to evaluate the effects of a regional anesthesia regimen on the effects of breast cancer recurrence. Future directions will also seek to evaluate the benefits of long-acting local analgesia on postoperative pain and nausea, as these have held promising results in other surgical outcome studies.

NOTES

#16

ASPIRIN, NSAIDS AND OVARIAN CANCER SURVIVAL

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Background: Regular aspirin (ASA) or nonsteroidal anti-inflammatory drug (NSAID) use is associated with a decreased incidence of ovarian cancer. Aspirin inhibits cyclooxygenase (COX) enzymes and downstream factors involved in tumorigenesis. It is not known if ASA/NSAID use is associated with improved survival.

Methods: Manual curation of electronic medical records (EMR) of 100 cases was performed and compared to MedEx capture of ASA/NSAID using a Kappa coefficient. Kaplan Meier Curves were used to evaluate associations between ASA/NSAID use and ovarian cancer survival. Further, we obtained quality RNA from 52 tumor samples from ovarian cancer cases and used quantitative PCR (qPCR) to assess the expression levels of VEGF-A, MMP-7 and COX-1. We compared relative gene expression levels in cases with ASA/NSAID use to levels in cases without ASA/NSAID use using parametric t-tests. The SAS program was used to perform statistical analyses.

Results: ASA/NSAID use from manual curation was concordant with MedEx capture (Kappa coefficient = 0.86). Survival analysis of ASA/NSAID use determined by MedEx and manual curation among tumor registry cases indicated improved overall survival among ovarian cancer cases with use with Hazard Ratios (HR) of 0.45-0.60. MMP-7 gene expression was significantly lower in ASA/NSAID cases (p=0.038).

Conclusions: MedEx provides a highly accurate capture of ASA/NSAID use, and has future utility for epidemiological studies on cancer survival. ASA/NSAID use is associated with better survival in ovarian cancer cases. MMP-7 was significantly lower in ovarian cancer cases with documented ASA/NSAID use.

#17

INTRODUCING RANDOM PERI-AREOLAR FINE NEEDLE ASPIRATIONS (RPFNA) IN A PUBLIC HOSPITAL SETTING FOR WOMEN AT INCREASED RISK FOR BREAST CANCER

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Introduction: RPFNA is a well-established research technique used to assess short-term breast cancer risk in women considered high risk. It has been shown that RPFNAs are feasible, reproducible and cost-effective. Previously published multi-institutional studies have been overwhelmingly dominated by Caucasian patients and failed to capture data on women of diverse ethnic backgrounds.

Objective: The aim of this study is to establish RPFNA in a public hospital serving women of diverse ethnic backgrounds as a feasible and reproducible technique to assess breast cancer risk.

Methods: 85 female patients seen in the comprehensive breast center or mammography clinics were screened. Of the 21 eligible patients, 14 were enrolled and 10 completed the entire RPFNA series on both breasts. Samples were collected and cytology assessed by a single cytopathologist at our collaborating institution who was blinded to patient characteristics.

Results: All samples were successfully collected, shipped and received at our collaborating institution. 85.7% (12/14) of enrolled patients were African American women. A majority of patients were enrolled on the basis of $\geq$1 first-degree relative with breast cancer (n=12/14). Patients who completed RPFNA had a mean age of 46.4 years (range, 35-55), mean modified Gail risk score of 1.54% (range, 0.4-3.0%), and mean BMI of 34.9 (range, 22.3-59.2). Patients eligible who subsequently enrolled in the study were younger in age (45.3 vs. 52.1) and had a first-degree relative with history of breast cancer (85.7% vs. 71.4%). 40% of RPFNA patients had an atypical Masood Cytology Index (mean: 13.2, 13) in at least one breast. Follow up calls were made and the procedure was well tolerated.

Conclusion: This single-institution study demonstrates that RPFNA is feasible in the public hospital setting. In addition to offering high risk screening for women in this setting, establishing RPFNAs at a public hospital in which a majority of patients are non-Caucasian is important as further preventative studies are proposed to investigate ideal surrogate end-point biomarkers and explore various pathways in the development of breast cancer.

Notes

#18

INJURY SEVERITY SCORE (ISS) AS A PREDICTOR OF PERIOPERATIVE COMPLICATIONS IN OPEN HUMERUS FRACTURES

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Introduction: Patients with open humerus fractures are often subjected to high velocity forces. The extent of these injuries may intuitively correlate with outcomes; however, not all patients will undergo definitive fixation during their hospitalization. As such, we sought to determine the relationship between Injury Severity Score (ISS) and perioperative complications after open reduction and internal fixation (ORIF) of traumatic open humerus fractures.

Methods: A retrospective analysis of the National Trauma Data Bank from 2007-2010 utilizing ICD-9 codes was conducted. Patients >18 years old who underwent open reduction and internal fixation (ORIF) of the humerus at a level I or level II trauma center were included. ISS was stratified into four groups, 1: <16, 2: 16-24, 3: 25-75, and 4: unknown. ISS <16 served as the reference group.

Results: A total of 5,663 patients met the inclusion criteria, the majority of whom were white (65%) males (71%) ages 25-44 (39%) with private insurance (26%) whose fracture resulted from blunt trauma secondary to motor vehicle collision (26%). The average hospital length of stay was 11.8 days with a mean of 3.5 days in the intensive care unit. 59% of patients had an ISS of <16. On multivariate analysis, increasing ISS (group 2 and 3) increased the odds of developing an organ/space surgical site infection (SSI), sepsis, or any infection (Table). Further, the odds of having any perioperative complication in addition to death within 30 days of admission increased with increasing ISS (Table). Superficial SSI was increased by almost five times for ISS group 3 (OR: 4.73 CI: 2.3-9.2 p<0.001), and deep SSI was increased more than seven times for ISS group 2 (OR: 7.68 CI: 1.31-45.14 p=0.024) compared to an ISS of <16.

	Overall				Infections											
	Any Complication		Death		Superficial SSI		Deep SSI		Organ/Space SSI		Systemic Sepsis		Any SSI			
	ISS 2	ISS 3	ISS 2	ISS 3	ISS 2	ISS 3	ISS 2	ISS 3	ISS 2	ISS 3	ISS 2	ISS 3	ISS 2	ISS 3		
Odds Ratio	3.44	10.45	5.7	14.04	1.96	4.73	7.68	5.85	3.53	17.59	3.30	11.07	3.35	11.00		
p value:	<0.001	<0.001	0.003	<0.001	0.130	<0.001	0.024	0.074	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
95% CI	2.57 4.61	8.08 13.53	1.73 15.66	5.10 38.66	0.81 4.7	2.3 9.7	1.3 45.1	0.8 40.6	2.4 5.1	9.1 17.3	1.7 6.6	4.4 14.4	2.3 4.7	8.2 14.8		

Conclusion: Injury Severity Score is an accurate predictor of perioperative complications associated with ORIF of traumatic open fractures of the humerus. This is particularly true of infectious complications and mortality. In general, with increasing ISS there is an increase in the odds of developing a perioperative complication.

#19

WHATEVER HAPPENS TO TRAUMA PATIENTS WHO LEAVE AGAINST MEDICAL ADVICE?

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Introduction: Trauma patients frequently leave the hospital against medical advice (AMA). The fate of these patients remains mostly unknown.

Objective: To describe the subsequent outcomes of trauma patients that were discharged AMA.

Methods: Patients with traumatic injuries were identified in the California State Inpatient Database, 2007-2011. Variables included were demographic (sex, age, race, insurance status), clinical (injury severity score, co-morbidities measured with the Charlson Co-morbidity Index [CCI], history of psychiatric disorders, length of stay, complications), and hospital (trauma center status, bed size) characteristics. We determined the outcomes including: rates, reasons, locations, and factors associated with readmissions of patients discharged AMA. These patients were compared to trauma patients that went home using logistic regression models, Chi-square and Fisher's exact tests.

Results: There were 269,357 trauma admissions during the study period with 203,756 (78.0%) discharged home and 4,480 (1.7%) discharged AMA. The AMA group had higher Charlson scores and were almost twice as likely to have psychiatric disorders ($p<0.001$). Compared to those discharged home, patients discharged AMA had significantly higher 30-day readmission rates (17.1% vs. 6.8%), rates of multiple readmissions (3.8% vs. 1.1%), and likelihood of being readmitted at different hospitals (51.2% vs. 36.0%) ($p<0.001$). Differences in reasons for readmission identified by multivariate analyses showed more patients discharged AMA were readmitted for psychiatric conditions [aOR: 1.67 (1.21–2.27)].

Conclusion: Patients discharged AMA are at least three times more likely to have multiple readmissions compared to those discharged home, and half of them present at different hospitals. Better understanding of patient and social factors that influence decisions to leave AMA is crucial to reducing readmissions among trauma patients.

Notes

#20

TRAUMA RECIDIVISM AND PREVENTABLE DEATH

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Introduction: While trauma recidivism involving repeat hospital admissions is well studied, the relationship between trauma recidivism and long-term mortality is not.

Objective: To determine the burden of trauma recidivism in an urban trauma center, to define the characteristics of trauma recidivists compared to non-recidivists, and to explore the relationship between trauma recidivism and long-term mortality.

Methods: The trauma recidivists and non-recidivists admitted to an urban trauma center from 1997 to 2008 were identified and compared. The trauma center database was linked to the Cause of Death National Death Index to determine both the cause of and time to death. Statistical analysis included chi-squared tests and Kaplan Meier survival analysis.

Results: Trauma recidivists admitted more than once were 6.8% of the total trauma population from 1997 to 2008, representing 3493 patients. Recidivists were more likely to be male ($p<0.0001$), Black ($p<0.0001$), have a blood alcohol level (BAL) above 0.8% ($p<0.0001$) and suffer a penetrating injury ($p<0.0001$) compared to non-recidivists. The five-year mortality rate for recidivists was significantly higher than non-recidivists with a rate ratio of 1.41 (95% CI 1.28-1.55). Recidivists with both blunt [1.3 (95% CI 1.15,1.46)] and penetrating [1.33 (95% CI 1.12,1.57)] injuries had an increased five-year mortality rate ratio compared to non-recidivists with similar injuries.

Conclusion: These data suggest that gender, race, elevated BAL and mechanism of injury are associated with trauma recidivism leading to a higher risk of death. There is a critical public health need to implement interventions to reduce trauma recidivism and preventable death.

#21

COMPARISON OF DECOMPRESSIVE CRANIECTOMY OUTCOMES IN STROKE VERSUS TRAUMATIC BRAIN INJURY PATIENTS

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Introduction: Decompressive craniectomies (DC) are indicated for strokes and traumatic brain injury (TBI).

Objective: Our study compares DC outcomes between stroke and TBI patients in a national database.

Methods: Utilizing the HUCP-NIS database from 2005-2010, patients who underwent DC for stroke or traumatic brain injury (TBI) were selected. Patients were divided into two groups based on age, 18-64 and $\geq$65 years. The outcomes assessed include hospital survival, postoperative complications, and length of stay (LOS).

Results: Of patients undergoing DC, 8,058 had TBI and 486 had stroke. Hospital survival was diminished for patients $\geq$65 years ($p<0.001$). The presence of liver disease decreased hospital survival ($p<0.01$). Obesity resulted in higher rates of post-operative infections ($p<0.05$) and CNS complications ($p\leq0.001$). In the TBI cohort, females had a lower in-hospital survival rate ($p<0.05$) and patients $\geq$65 years had shorter LOS after DC ($p<0.001$).

Conclusions: Our study demonstrates that among patients undergoing DC, younger age and male gender positively impacted in-hospital survival for the TBI cohort when compared to the stroke cohort.

#22

EPIDEMIOLOGY OF LAWNMOWER-RELATED INJURIES IN CHILDREN: A TEN YEAR REVIEW (2004-2013)

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Introduction: Lawn mower-related injuries (LMI) in children are commonly disfiguring and nearly always preventable.

Objective: Due to concerns about the large number and severity of these injuries, we sought to describe the current epidemiology of pediatric LMI in the United States.

Methods: 2004-2013 data were obtained from the National Electronic Surveillance System (NEISS) of the United States Consumer Product Safety Commission (CPSC) for children between 0 and 20 years old.

Results:

	10 Year National Estimates (n = 93,508)
Average Annual Incidence	9,351
Mean Age (Q1, Q3)	11.6 (6,17)
Male (%)	79.5
Race: % White/Black/Other/Unknown	64/8/5/23
Body Part Injured (%)	
Head and Neck	19
Trunk	9
Upper Extremity / Hand and Finger	9 / 30
Lower Extremity / Foot and Toe	17 / 13
Other	3
Types of Injuries (%)	
Fracture / Amputation	9 / 4
Burn / Soft Tissue Injury / Laceration	13 / 23 / 33
Foreign Body (projectile injury)	4
Other	14

Conclusion: Manufacturer safety standards for outdoor power equipment have not been revised since 2003. The estimated annual incidence of LMI in children has remained unchanged over the past decade, nor when compared to a previous 15-year review using US CPSC data for the same age group. Reinforcement of prevention strategies and manufacturer redesign of lawn mowers are long overdue.

NOTES

#23

IVC FILTER PLACEMENT IN HIGH-RISK BARIATRIC PATIENTS: A PART OF THE VTE PREVENTION CONTINUUM

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Introduction: Morbid obesity is a well-established risk factor for the development of venous thromboembolism, and inferior vena cava (IVC) filter placement prior to bariatric surgery has been utilized in high-risk patients.

Objective: To evaluate the outcomes of IVC filter placement in high-risk bariatric patients at a single institution.

Methods: A retrospective review of prospectively collected data was performed on patients who underwent bariatric surgery from August 2008 to June 2013. Demographic data including BMI was collected for high-risk bariatric patients who received prophylactic IVC filter placement. The outcomes of interest were deep venous thrombosis (DVT) and pulmonary embolism (PE).

Results: Of 284 bariatric surgery patients, 26 (9.2%) were identified as high-risk for VTE and received prophylactic IVC filter placement. The majority of patients were female (88.5%), Black (88.5%), and had a mean BMI of 60.1 kg/m^2. The operative morbidity and mortality was 0%. Patients were followed for one year and the rate of postoperative DVT was 3.8% (1 patient) and the rate of PE was 0%.

Conclusion: DVT prophylaxis along with IVC filter placement in high-risk bariatric surgery patients demonstrates a low rate of postoperative VTE. Prophylactic IVC filter placement is feasible and should be considered.

#24

VTE OUTCOMES IN BARIATRIC SURGERY PATIENTS: THE ROLE OF OPERATIVE TIME

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Introduction: Morbid obesity is a well-established risk factor for the development of venous thromboembolism (VTE). The role of operative time and VTE outcomes needs to be elucidated within this high-risk population.

Objective: To evaluate the VTE outcomes of bariatric surgery patients in a national database.

Methods: A retrospective review of the ACS-NSQIP Dataset was performed on patients who underwent bariatric surgery from 2005 to 2010. Patient characteristics including BMI, co-morbidities, and VTE risk factors were collected. The outcomes of interest were postoperative VTE and operative time. VTE rate and operative time interval were analyzed using Pearson chi^2 test and adjusted multivariate logistic regression.

Results: Of 6,616 bariatric surgery patients, 74.6% and 25.4%, underwent LRYGB and LSG, respectively. Most were female 75.2%, had a BMI of 40-49.9 kg/m^2 (45%), and non-smokers (86%). The overall VTE rate was 0.88%. The VTE rate was 0.77% and 0.91% for LRYGB and LSG, respectively. VTE rate by operative time was 0.65%, 0.80%, 1.43%, and 1.78% for <2hrs, 2-3hrs, 3-4hrs, and >4hrs, respectively ($p<0.023$). On adjusted analysis, there was an increased likelihood of VTE as the operative time increased above 3 hours (OR: 2.18 CI: 1.02-4.68 for 3-4 hours and OR: 2.43 CI: 1.05-5.61).

Conclusion: Operative time plays a vital role in VTE outcomes among bariatric surgery patients. Bariatric surgeons should consider efficiency while operating to improve VTE outcomes.

#25

FACTORS AFFECTING COMPLETION OF WEIGHT LOSS SURGERY PROGRAM AMONG END-STAGE-RENAL-DISEASE PATIENTS FOR TRANSPLANT CONSIDERATION

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Introduction: BMI < 35 is a common requirement for placement of end-stage-renal-disease (ESRD) patients on transplant lists.

Objective: This project explores factors that potentially affect completion of a weight loss surgery program and subsequent weight loss surgery (WLS) among ESRD patients who have been denied active status on transplant list secondary to high BMI (>35 kg/m^2).

Methods: All ESRD patients seeking WLS ultimately for transplant-related purposes at our institution from 2010 to 2014 totaled 14, and chart review of each was completed.

Results: Of the total 14 patients, 2 achieved appropriate weight loss via conservative means and 2 are still being evaluated. 8 of the 10 remaining patients (80%) are female and of the 8 patients for which race data is available, 6 (75%) are Black, 1 (12.5%) is White, and 1 (12.5%) is Hispanic. 2 of the remaining 10 patients obtained weight loss surgery and were subsequently placed on the transplant list in active status. The remaining 8 patients did not complete the program secondary to lack of compliance with visits (75%), ongoing substance abuse (12.5%) and medical problems that precluded WLS (12.5%). Factors that appear to correlate with program completion include lower initial BMI (at first office visit) and high rate of clinic visit attendance.

Conclusion: Poor compliance with clinic visits appears to be the main mechanism by which patients did not complete the program. Solutions that may improve program completion rates include: grouping of provider (i.e. dietitian, care manager, surgeon) visits and possible earlier referral for weight loss surgery (perhaps while a patient is still in the chronic kidney disease stage and has a lower BMI).

#26

OUTCOMES OF SUPER-MORBID OBESE BLACK BARIATRIC SURGERY PATIENTS

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Introduction: A paucity of data exists for bariatric surgery among super-morbid obese Black patients.

Objective: To evaluate the outcomes of bariatric surgery among super-morbid obese Black patients at an urban academic institution.

Methods: A retrospective review of prospectively collected data was performed on patients who underwent bariatric surgery from August 2008 to June 2013. Data collected included BMI and co-morbidities on patients with a BMI greater than 50 kg/m^2. Outcomes of interests included mean BMI and resolution of co-morbidities.

Results:

	LRYGB	**LSG**
Total patients (n)	77	18
Mean Pre-op BMI	57	55.9
Patient Outcomes	**Mean BMI**	
1 month	51.5	49.8
6 months	43.8	46.2
12 months	38.9	44.4
Co-Morbidities at 1 year	**Percent Resolution**	
Hypertension	43	46
Dyslipidemia	89	82
Diabetes mellitus	84	60

Conclusion: Super-morbid obese Black patients undergoing Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) show higher rates of resolution of certain co-morbidities than those undergoing Laparoscopic Sleeve Gastrectomy (LSG).

#27

RACIAL DISPARITIES IN ADOLESCENT PATIENTS UNDERGOING BARIATRIC SURGERY

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Introduction: Pediatric obesity has become an epidemic in the United States healthcare system, with more than 30% of children classified as overweight and almost 17% classified as obese. Of the children who suffer from obesity, which is classified as a BMI > 30, there are strict guidelines in regards to adolescent bariatric surgery. It is well-established that adolescent minorities suffer at a disproportionately higher rate than their Caucasian counterparts.

Methods: From 2012-2013, we reviewed data from the Participant Use Data File (PUF) available from the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP). All patients were queried with the key word "obesity" and patients who had undergone bariatric surgery were included in the analysis.

Results: Twenty-five patients were identified to have bariatric surgery within the time period noted. The average patient age was 16.28 years old and the average BMI was 51.74. The most common surgery was roux-en-y gastric bypass (19/25) and adjustable gastric band was the second most common (6/25). Female adolescents (19/25) were far more likely than males (6/25) to undergo bariatric surgery. Caucasian adolescents (14/28) were more likely to undergo bariatric surgery than all other races combined. African-Americans were the second most common group to undergo bariatric surgery (8/28), followed by Asians (1/28). Two patients had their race listed as unknown. Only 8/25 patients had diabetes mellitus.

Conclusions: The use of bariatric surgery has revealed a disparity in surgical healthcare delivery when compared to Caucasian counterparts. The underlying reason for this disparity is likely to be multifactoral stemming from physician referral patterns, patient cultural differences, and insurance reimbursements. The next phase of our research will be to employ the use of a larger US database for review and to disseminate surveys to clinicians and patients to investigate the root cause of this disparity.

#28

SUCCESSFUL OUTCOMES AFTER BARIATRIC SURGERY IN BLACK PATIENTS

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Introduction: The incidence of obesity has reached epidemic proportions affecting one-third of US adults. Few studies evaluate the outcomes of bariatric surgery on Black patients.

Objective: Our study aims to evaluate outcomes of bariatric surgery at an urban academic institution serving predominantly Black patients.

Methods: A retrospective review of prospectively collected data was performed on patients who underwent bariatric surgery from August 2008 to June 2013. Data was collected on 284 patients of whom 90% identified themselves as African American. Data collected included BMI and co-morbidities. Outcomes of interest included mean BMI and resolution of co-morbidities.

Results:

	LRYGB	LSG	LAGB
Total patients (n)	209	45	30
Mean Pre-op BMI	48.7	48.6	42.2
Patient Outcomes	**Mean BMI**		
1 month	44	44	39
6 months	37	41	39
12 months	34	41	35
Co-Morbidities at 1 year	**Percent Resolution**		
Hypertension	50	52	57
Dyslipidemia	83	76	78
Diabetes Mellitus	80	71	75

Conclusion: Black patients receiving bariatric surgery have successful outcomes at one year. In a population with higher rates of obesity and obesity related co-morbidities, bariatric surgery can serve as a viable option for treatment.

Notes

#29

OUTCOMES AFTER BARIATRIC SURGERY IN BLACK MALE PATIENTS

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Introduction: Black males have among the highest rates of morbid obesity and represent the lowest percentage receiving bariatric surgery.

Objective: Our study aims to evaluate the effectiveness of bariatric surgery among Black male patients at an urban academic institution.

Methods: A retrospective review of prospectively collected data was performed on patients who underwent bariatric surgery from August 2008 to June 2013. Data was collected on 284 patients of whom 90% identified themselves as African American. Data collected included BMI and co-morbidities. Outcomes of interest included mean BMI and resolution of co-morbidities.

Results:

	LRYGB	**LSG**	**LAGB**
Total patients (n)	74	17	10
Mean Pre-op BMI	45	53	45
Patient Outcomes	**Mean BMI**		
1 month	41	45	41
6 months	36	40	42
12 months	35	45	35
Co-Morbidities at 1 year	**Percent Resolution**		
Hypertension	60	17	50
Dyslipidemia	80	16	75
Diabetes Mellitus	64	100	75

Conclusion: Black male patients receiving bariatric surgery have an overall decrease in BMI and resolution of co-morbidities. Bariatric Surgery utilization among Black males is a viable option for the treatment of morbid obesity.

NOTES

#30

NECROTIZING ENTEROCOLITIS LINKED TO PAUCITY OF BACTERIA IN AN EXPERIMENTAL NEONATAL RAT MODEL

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Introduction: Although the etiology of necrotizing enterocolitis (NEC) is not clear, abnormal bacterial colonization of the gastrointestinal tract may play a critical role in its pathogenesis.

Objective: To study the role of the intestinal microbiota in the pathogenesis of experimental NEC. We hypothesized that antibiotic administration may predispose to the development of NEC by decreasing the quantity of bacteria.

Methods: We induced NEC in neonatal rats by subjecting them to thrice daily formula feeding and hypoxia. There were six treatment groups: formula/hypoxia alone, or with early (starting day of life #1), or late (starting day of life #3) ampicillin administration, addition of the opportunistic pathogen *Cronobacter muytjensii* alone, or in combination with early or late ampicillin administration. Animals were sacrificed on day of life #4. The terminal ileum was scored histologically (NEC $\geq$2). Microbiota was characterized by culture-based 16S rRNA sequencing.

Results: The baseline of formula feeding and hypoxia produced an NEC incidence of 29%. As expected, *C.muytjensii* increased the incidence of NEC to 69% (p=0.0013 compared to baseline). However, the bacterial load was low, ranging 101-104/100 µL specimen. When ampicillin was given early with *C. muytjensii*, the incidence decreased to 25% (p=0.0185 compared to *C.muytjensii*) but the bacterial load was higher, ranging 106-108/100 µL. Late administration of ampicillin with *C.muytjensii* resulted in an incidence of 71% (p=0.0047 compared to baseline) and a low bacterial load on the order of 101/100 µL. Ampicillin alone, regardless of timing, produced a high NEC incidence (early 67%, late 75%) and low bacterial load of less than 101/100 µL.

Conclusion: Exacerbation of experimental NEC by administration of *C.muytjensii* is associated with decreased bacterial load, possibly due to impairment of colonization. Ampicillin is beneficial when administered early and in the presence of a susceptible opportunistic pathogen. Such protection is associated with increased quantity of bacteria. We conclude that early antibiotic administration in the presence of an opportunistic pathogen may limit its growth while allowing commensal bacteria to flourish.

NOTES

#31

COX-2 INHIBITION SUPPRESSES ENTEROCYTE MIGRATION INDUCED BY UDCA

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Introduction: The secondary bile acid, ursodeoxycholic acid (UDCA), plays a role in intestinal epithelial cell signaling. Previous work in our lab has shown that UDCA promotes enterocyte migration and induces cyclooxygenase-2 (COX-2). COX-2 and its product, prostaglandin E2 (PGE2), are key mediators of enterocyte cell signaling. PGE2 acts on four G-protein coupled receptors (EP1-4) and has been shown to promote enterocyte migration via EP2 receptor activation. Therefore, we hypothesized that UDCA promotes enterocyte migration by inducing COX-2 and that a selective COX-2 inhibitor, Rofecoxib, would inhibit UDCA induced migration.

Methods: Rat intestinal epithelial cells (IEC-6) were treated with UDCA (0.1μM to 400μM) for 12 hours. COX-2 expression was examined using Western blot. IEC-6 cell migration was measured using a modified wound-healing assay by creating circular holes in cell monolayers and observing them over 6 hours. Cells were treated with or without 200μM UDCA or 10μM COX-2 inhibitor, Rofecoxib. Statistical analysis was performed using Student's t-test.

Results: UDCA significantly increased COX-2 expression in a dose-dependent manner at doses greater than or equal to 10μM. UDCA at 200μM increased COX-2 expression 2.7 ± 0.6 fold from control ($p<0.05$). UDCA at 200μM also increased wound closure $18\% \pm 0.19$ from control ($p<0.05$). Pre-treatment with the COX-2 inhibitor, Rofecoxib, significantly inhibited UDCA-induced IEC-6 migration.

Conclusion: These data suggest a novel role for COX-2 in UDCA-induced stimulation of intestinal epithelial cell migration. This may represent a novel pathway to enhance epithelial restitution after injury.

#32

ENVIRONMENTAL MEDIATED INTESTINAL RESTITUTION

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Introduction: Cell turnover and migration is disturbed in many gastrointestinal diseases. The aryl hydrocarbon receptor (AhR) is a transcription factor that links environmental signals to the intestinal immune system. The role of AhR in intestinal repair is not known.

Hypothesis: AhR signaling plays a central role in enterocyte proliferation and migration after injury.

Methods: C57B/6 wild type (WT) and C57B/6 $AhR^{-/-}$ (KO) were subjected to intestinal injury by exposing them to a lethal dose of radiation (12 g). Crypt regeneration was determined as the % of crypts per section with $\geq$5 BrdU positive cells. Histology was also analyzed to measure villus height and crypt depth.

Results: KO mice subjected to radiation have a higher percentage of regenerative crypts than WT mice (49.4% vs. 17.69%); p value = 0.05. In addition, KO mice (17.8 μm) showed a trend to having deeper crypts compared to WT (26.3 μm), p value = 0.075. There were no differences in villus height and histologic tissue injury.

Conclusion: AhR deficient mice have higher rates of regenerative crypts compared to WT mice, suggesting that AhR signaling may lead to worse intestinal repair after injury. Further studies are needed to clarify the mechanism responsible for these findings.

#33

EFFECT OF MK-2206 ON AKT AND NOTCH PATHWAYS IN HEPATOCELLULAR CARCINOMA

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Introduction: In recent years, Notch signaling and the Akt pathway have received increasing attention as a target for cancer prevention and therapy. Studies have shown that there is a cross-talk between PI3-K and Notch pathways in cancer. Previously, we have shown that MK-2206, a specific Akt inhibitor, reduces hepatocellular carcinoma (HCC) proliferation. To further delineate the effects of MK-2206, we sought to investigate the Notch-1 pathway. We hypothesize that MK-2206 treatment will result in Notch-1 inhibition either in parallel or linear fashion with subsequent Akt suppression.

Objective: To further delineate the effects of MK-2206 in HCC and determine a potential association between PI3-K and Notch-1 pathways.

Methods: Established HCC cell lines were treated with various concentrations of MK-2206. shRNA against Notch-1 was used to observe interaction between Notch-1 and pAkt. Cell lysates were analyzed via Western blotting for Notch-1 and p-Akt 473 expressions.

Results: Following treatment with MK-2206 (up to 1μM), there was a concomitant reduction in Notch-1 expression paralleling previously reported reduction in p-Akt 473. Knockout of Notch 1 in HCC cell lines correlated with reduction in Akt phosphorylation.

Conclusion: MK-2206, a specific Akt inhibitor, inhibits both the PI3-K and Notch-1 pathways. Therefore, further characterization of MK-2206 comparing the two pathways in parallel or a linear fashion is warranted.

#34

BILE ACIDS MODULATE INTESTINAL CELL PROLIFERATION VIA SRC

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Introduction: The secondary bile acid deoxycholic acid (DCA) is the product of bacterial modification of taurine-conjugated cholic acid (TCA) in the intestine. Levels of DCA are increased in experimental necrotizing enterocolitis, and previous work suggests that DCA inhibits cell proliferation while TCA stimulates proliferation via differential regulation of EGFR (epidermal growth factor receptor). Bile acids can interact with the farnesoid X receptor (FXR) and the G protein-coupled bile acid receptor 1 (GPBAR1), both of which are known to differentially regulate the Src kinase/EGFR pathway. We hypothesize that DCA and TCA differentially regulate intestinal epithelial cell proliferation via Src kinase.

Methods: Rat intestinal epithelial cell (IEC-6) proliferation was measured using crystal violet staining and nucleic acid incorporation (EdU). FXR was blocked using z-guggulsterone. GPBAR1 was activated with oleanolic acid and Src kinase was blocked with PP2. We assessed Src phosphorylation by immunoblotting.

Results: DCA treatment led to a dose-dependent decrease in cell proliferation, while TCA or oleanolic acid treatment led to a dose-dependent increase in proliferation. Blocking FXR activity abolished the anti-proliferative effects of DCA. Blocking Src abolished the proliferative effects of TCA. Src phosphorylation was observed after TCA administration. In contrast, DCA treatment led to a dose-dependent decrease in proliferation and did not induce Src activation.

Conclusion: These results suggest that TCA may induce intestinal cell proliferation via GPBAR1 and Src activation, while DCA inhibits proliferation via FXR activation leading to Src inhibition. Since elevated secondary bile acid levels are the results of specific bacterial modification, this may provide a mechanism by which an altered microbiome contributes to diseases such as necrotizing enterocolitis.

#35

PERIOPERATIVE COMPLICATIONS OF ORIF FOR TRAUMATIC OPEN FEMUR FRACTURES IN THE ELDERLY

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Introduction: Elderly patients 65 years and older represent an increasing proportion of the population, and they are typically more susceptible to open femoral fractures. However, factors such as bone quality, nutritional status and comorbidites may affect treatment approaches and outcomes. We aim to assess 30 day perioperative complications associated with open reduction and internal fixation (ORIF) of open femoral fractures in the elderly.

Methods: A retrospective analysis of the National Trauma Data Bank (NTDB) from 2007-2010 utilizing ICD-9 codes was conducted. Cases ≥ 18 years old, who underwent ORIF of the femur at a level I or level II trauma center were included. Univariate, bivariate, and multivariate analyses were performed.

Results: 9,406 patients met the inclusion criteria, with the majority being white (61%), males (73%), between 25-44 years old (41%) with a mean age of 29 years. Patients with private insurance (25%) and injury via motor vehicle collisions (34%) were most common. Elderly patients comprised 9.5% of the total population of which 85% were White and 62% were female. Elderly patients were 85% more likely to have fixation after hospital day 2 (OR: 1.85 CI: 1.49-2.29 $p<0.001$), 94% more likely to have an organ/space surgical site infection (OR: 1.94 CI: 1.32-2.37 $p=0.001$), and more than seven times more likely to die (OR: 7.58 CI: 3.71-15.49 $p<0.001$). All patients were over three times more likely to die if they had at least one perioperative complication (OR: 3.6 CI: 2.48-5.24 $p<0.001$). All age groups were more likely to have at least one complication compared to those 18-24 years with the elderly having the greatest odds at 67% (OR: 1.67 CI: 1.25-2.21 $p<0.001$), followed by ages 45-64 (OR: 1.47 CI: 1.22-1.78 $p<0.001$), and ages 25-44 (OR: 1.30 CI: 1.10-1.55 $p=0.002$).

Conclusion: While the elderly represent a small proportion of open femoral fracture cases, they are more likely to have a perioperative complication including infections. Moreover, elderly patients are the group most likely to suffer the most profound complication of all; perioperative death as compared to their younger counterparts. While direct causality cannot be identified with this study, it is probable that a reduction of overall complications in this patient population could improve perioperative mortality.

NOTES

#36

OPEN REDUCTION AND INTERNAL FIXATION OF RIB FRACTURES FOR PATIENTS WITH FLAIL CHEST

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Introduction: Previous studies have shown that open reduction and internal fixation (ORIF) of fractured ribs for flail chest is safe, but which patients are most likely to benefit from this therapy is unknown.

Objective: To evaluate outcomes of ORIF compared with nonoperative management (NOM) of flail chest in patients with polytrauma at our Level I Trauma center.

Methods: The Trauma Registry was used to identify 141 adult polytrauma patients with flail chest admitted between January 2008 and November 2014. Medical records and radiographs were reviewed to confirm radiographic evidence of flail chest (defined as at least two fractures per rib, in more than two consecutive contiguous ribs). Other exclusion criteria were age < 17, postinjury survival < 48 hours and ISS < 16. Outcomes were compared using Chi-square and t-tests.

Results: Eighty six patients with flail chest were identified (ORIF - 41, NOM - 45). One patient died after ORIF and 4 during NOM. The ORIF and NOM patients had similar mean age (50 vs. 56, $p=0.12$), number of rib fractures (11.2 vs. 10.6, $p=0.40$), and Injury Severity Score (27.5 vs. 29.3, $p=0.44$). The groups had similar Chest and Head Abbreviated Injury Score (AIS). There was no difference in the incidence of intubation, tracheostomy, hemothorax, pneumothorax and pneumonia. Hospital length of stay (LOS) was significantly longer in the ORIF group than that of the NOM group (27.7 vs. 13 days, $p<0.01$), as was ICU length of stay (14.1 vs. 8.1 days, $p<0.01$). There was a trend towards longer time on the ventilator in the ORIF group (9.5 vs. 5.9 days, $p=0.10$).

Conclusion: In this retrospective study, polytrauma patients with flail chest treated by ORIF had longer hospitalization and ICU stay, but a trend towards reduced in-hospital mortality. Future studies should be designed to optimally identify which patients are most likely to benefit from ORIF.

#37

GERMLINE SUCCINATE DEHYDROGENASE (SDH) B MUTATION STATUS MAY BE ASSOCIATED WITH ADVERSE OUTCOME IN PATIENTS WITH THORACIC PARAGANGLIOMAS

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Objective: Paragangliomas (PGLs) occur in the thorax as primary lesions or as metastases, most commonly from abdominal or pelvic PGLs. Limited information is available concerning molecular and clinical features of these neoplasms. This study was undertaken to examine pre- and post-operative characteristics of patients undergoing resection of primary and metastatic thoracic PGLs.

Methods: Retrospective review of a prospective database from a single high-volume referral center.

Results: Of 297 operations for PGLs from 2000-2013, 11 (4%) were performed for thoracic disease. Multiple intrapulmonary lesions were identified in 4 patients, whereas 7 patients had either solitary paraspinal, paraortic, paratracheal, pleural or intracardiac lesions. Average diameters of solitary and metastatic lesions were 4.3 cm and 1 cm, respectively. Familial germline SDH mutations were detected in 8 of 11 patients. Preoperatively, all had elevated serum catecholamine/metanephrine levels and were treated with phenoxybenzamine and atenolol. All resections were felt to be curative. No operative mortality was observed; two patients developed chylothorax. Postoperatively, three patients had elevated serum catecholamine/metanephrine levels, independent of presentation or radiologic recurrence. With a median follow-up of 34 months, 5 patients recurred (all in the chest) with a 12-month median time to recurrence. All 4 patients that presented with multifocal metastatic disease recurred. Overall progression-free survival (PFS) was 13 months; overall survival was 30 months.

Five of 7 patients with SDHB mutations recurred with a PFS of 7 months. A single patient with an SDHD mutation has not recurred at 20 months. One of 3 patients without SDH mutations recurred with a PFS of 17 months.

Conclusions: Thoracic PGLs are rare tumors. Thoracic PGLs arising in patients with germline SDHB mutations appear to have a more aggressive phenotype with increased predilection for recurrence.

NOTES

#38

LAPAROSCOPIC VERSUS OPEN DISTAL PANCREATECTOMY: TREND TOWARDS STANDARD OF CARE

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Background: Although late to embrace minimally invasive approaches, the hepatopancreatobiliary community has seen a recent paradigm shift in treatment of distal pancreatic masses. However, comparative outcomes between the conventional open approach and newer minimally invasive techniques outcomes beyond traditional operative complications remain limited.

Methods: We performed a retrospective review of a prospectively maintained pancreatic resection database and identified 128 patients who underwent distal pancreatectomy (DP) at a regionalized high volume tertiary academic center between 2008 and 2012. Cohorts were matched for important patient-level factors including age, sex and body mass index. Comparative analysis of peri- and post-operative process and outcomes measures were performed.

Results: 30/128 (23%) patients underwent conventional open distal pancreatectomy (ODP) and 98/128 minimally invasive distal pancreatectomy (MIDP). Tumor size was larger for the OPD patients (3.3 cm vs. 3 cm, p=0.043). As compared to their OPD counterparts, MIPD was associated with shorter length of stay (6.18 days vs. 7.43 days, p=0.032) and lower estimated blood loss (251 ml vs. 599 ml, p<0.001). Operative time, post-operative pancreatic fistulas rates, complication rates, 60-day readmission rates, and time to adjuvant chemotherapy were comparable between cohorts.

	Minimally Invasive Distal Pancreatectomy (MIDP) n=98 (77%)	Open Distal Pancreatectomy (ODP) n=30 (23%)	p Value
Mean tumor size	3.3	4.3	**0.043**
Mean length of stay	6.18	7.43	**0.032**
Mean estimated blood loss	251	599	**0.001**
Mean operative time (in minutes)	168.30	174.06	0.514
Pancreatic fistula	12 (12%)	7 (23%)	0.149
Number with complications	43 (44%)	14 (47%)	0.836
60-day hospital readmission rate	20 (20%)	6 (20%)	1.00
Mean time to start adjuvant chemotherapy (days)	98.1	85.8	0.819

Conclusion: MIDP was found to offer comparable process, outcomes and adjuvant therapy measures with shorter LOS as compared to ODP performed at a high annual pancreatectomy case-load center. MIDP may therefore serve as a new standard approach to distal pancreatic lesions and further studies should assess differences in patient reported outcomes, quality of life, resource utilization and the completion of adjuvant systemic therapies.

#39

GENDER-BASED DIFFERENCES IN SURVIVAL AMONG PATIENTS WITH LOCALIZED PANCREATIC CANCER

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Introduction: Pancreatic cancer (PC) is slightly more common in men than women. The impact of gender on overall survival is unknown.

Methods: From 2009-2014, patients with resectable or borderline resectable (BLR) PC treated with neoadjuvant therapy prior to planned surgery were classified by gender.

Results: Neoadjuvant therapy with surgical intent was initiated in 247 patients; 119 (48%) women and 128 (52%) men. BLR disease was present in 64 (54%) of the 119 women and 79 (62%) of the 128 men (p=0.21). No differences in age-adjusted Charlson Comorbidity Index, or CA 19-9 levels at baseline or after neoadjuvant therapy (preop) were observed. Normalization of preop CA 19-9 levels occurred in 62 (52%) of 119 women and 53 (61%) of 128 men (p=0.09). Of the 247 patients, 179 (72%) completed all intended therapy (neoadjuvant therapy and surgery); 95 (80%) of 119 women and 84 (66%) of the 128 men (p=0.01). Metastatic disease was the most common reason all intended therapy was not completed; 18 (15%) women and 33 (26%) men (p=0.55). In multivariate analysis, failure to complete all intended therapy was associated with BLR clinical stage (OR: 0.26, 95% CI: 0.13-0.52), elevated post-treatment (after neoadjuvant therapy) CA19-9 (OR: 0.23, 95% CI:0.11-0.46). Men had a 42% decreased odds of completing all neoadjuvant therapy (OR: 0.58; 95% 0.30-1.08). Of the 179 patients who completed all therapy, node positive disease was present in 26 (27%) of the 95 women and 33 (39%) of the 84 men (p=0.09).

Median overall survival for all 247 patients was 24.3 months; 30.8 and 21.6 months for women and men, respectively (p=0.03). Of the 179 patients who completed all therapy to include surgery, the difference in survival between women and men was not statistically significant (38.4 months vs. 31.5 months, p=0.25). However, among 59 node positive patients, median overall survival was 46.1 months vs. 26.1 months for women and men, respectively (p=0.01).

Conclusions: Our data provide a signal to suggest that there may be a difference in response to anti-cancer treatment based on gender. Pancreatic cancer, similar to many other solid tumors, may be hormone responsive in some patients. Addition of hormone-based therapies to the exciting, new and more effective multi-agent systemic therapies represents an obvious next step.

NOTES

#40

THE RELATIONSHIP BETWEEN AGE AND PANCREATICODUODENECTOMY RESOURCE USE: A VALIDATED PILOT STUDY

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Background: Pancreaticoduodenectomy (PD) has become more common in the oldest of old (≥ 80 years). However, a paucity of data remains on the potential strain on resource utilization. We examined the use of PD-relevant hospital resources in patients treated at our institution and validated our results using a national dataset of high-volume-hospitals (HVH).

Methods: Perioperative outcomes and inpatient charges were compared across cohorts of increasing age (I: ≤ 70, II: 71-79, III: ≥ 80 years) in 99 patients who underwent PD between 2005 and 2013 at our institution. The generalized linear modeling approach was used to estimate the impact of age on health services charges. Validation utilized the University HealthSystem Consortium (UHC) database where we identified 210 HVH U.S. hospitals who performed 12,766 PDs (< 70 years n=8,564, 70-79 years n=3,302, ≥ 80 years n=900) between 2010 and 2014. We used linear regression models with and without adjusting for covariates to assess the impact of older age.

Results: At our institution, increasing age was associated with ICU use, increased length of stay and the likelihood of discharge to a skilled facility. After controlling for covariates, hospital charges were significantly higher in Cohort III (p=0.006) and Cohort II (p=0.035) as compared to Cohort I. However, hospital charges between Cohorts II and III were equivalent (p=0.374). Nationally, those ≥ 80 years experienced more cardiopulmonary, genitourinary and infectious complications, more blood transfusions, greater TPN use, longer LOS and higher direct costs as compared to the youngest cohort.

In congruence with our findings, there were no statistical differences between patients ≥ 80 years and those 70-79 years with respect to the administration of blood products, TPN or the direct cost of PD. Also, the oldest old nationally experienced fewer readmissions and had equivalent ICU-use and mortality rates to both younger cohorts.

Conclusion: In today's current healthcare market, providers are under increasing pressure to control costs while simultaneously improving outcomes. Therefore, it is imperative to identify, understand and mitigate drivers of increased costs and clarify whether or not they are age-related. Within our institution and a national dataset, we found the oldest old to have comparable outcomes and resource utilization to their septuagenarian counterparts. As the number of octogenarians undergoing PD continues to grow, the impact of this technically complex procedure on other important cancer care metrics including patient reported outcomes and quality of life now requires further assessment.

NOTES

#41

SPINDLE CELL MALIGNANCIES OF THE BREAST: A RARE TUMOR REVEALED

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Introduction: Spindle cell malignancies of the breast are rare, and current treatment practices have yet to be defined.

Objective: To use a nationally representative dataset to assess the features and treatment of spindle cell carcinoma of the breast.

Methods: The Surveillance, Epidemiology and End Results database was used to identify patients with breast spindle cell malignancies (ICD-O-3 codes 8004/3 for malignant tumor, spindle cell type, 8032/3 for spindle cell carcinoma, and 8801/3 for spindle cell sarcoma) between 1992 and 2011. Descriptive statistics were produced using Stata 12.1 software. Survival analysis was performed with two groups: partial mastectomy, and complete mastectomy (subcutaneous + total + modified radical + radical mastectomies).

Results: A total of 286 patients were identified (98.6% female, 86.4% white). The median age was 64 years. About 9.1% had estrogen receptor positive tumors, and 7.7% had progesterone receptor positive tumors. The majority (57.7%) presented with stage I or stage II disease. Nearly 29.7% underwent partial mastectomy. The proportion of patients receiving partial mastectomy increased from 26.0% for years 1997-2001, to 43.4% for years 2007-2011. Most patients (64.3%) did not receive radiation. Receipt of radiation had no significant impact on survival. Cancer-specific 5- and 10-year survival rates were 84.9% and 82.5%, respectively, for the partial mastectomy group, and 61.5% and 61.5%, respectively, for the complete mastectomy group. On Cox proportional model, the adjusted survival was worse for the complete mastectomy group compared to the partial mastectomy group (HR: 1.96; 95% CI: 1.10 - 3.49).

Conclusion: Spindle cell cancers of the breast have a strong predilection for women and hormone receptor negative status. Effective treatment with durable outcomes can be achieved through partial mastectomy without radiation for women with tumors amenable to breast conserving surgery.

#42

RACIAL AND GEOGRAPHIC VARIATIONS IN COLD ISCHEMIA TIME: KIDNEY VS. LIVER TRANSPLANTS

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Introduction: Cold ischemia time (CIT) is a well-known factor affecting transplant outcomes.

Objective: Variations in kidney and liver CITs by patient race/ethnicity and OPO regions were explored using UNOS data between 2010-2013.

Methods: Determinants of liver and kidney CITs were investigated using multivariable regressions with race/ethnicity, OPO characteristics and OPO fixed effects as the main explanatory variables. The regressions used graft travel distance, patient priority status, patient and donor demographic and clinical covariates, and organ characteristics as control variables. Spearman's rank tests were used to examine the relationship between mean CIT and graft failure rate per OPO.

Results: CIT varied significantly by recipient's race/ethnicity, OPO and OPO characteristics in addition to graft transfer distance. Average CITs of kidneys were substantially longer than those of livers after adjusting for graft travel distance.

Selected Results: Multivariable Regressions of Kidney & Liver CITs

	Kidney			Liver		
Cold Ischemia Time (hours)	Coef.	[95%Conf	Interval]	Coef.	[95%Conf	Interval]
Graft Transfer Distance ('000 miles)	3.06**	2.77	3.36	2.34**	2.17	2.5
Regional organ	4.80**	4.55	5.05	0.79**	0.69	0.8
National organ	6.93**	6.64	7.22	1.54**	1.36	1.7
African American Recipient	0.92**	0.73	1.12	-0.16*	-0.27	-0.0
Hispanic recipient	1.03**	0.78	1.30	-0.14*	-0.25	-0.0
Single Transplant Center OPO	-1.43**	-1.75	-1.12	-0.14*	-0.24	-0.0
No. of Ki or Li transplants in OPO ('000)	0.49**	0.37	0.62	0.29**	0.21	0.3
No. of procured Li/Ki Ratio in OPO	2.20**	1.25	3.16	-1.25**	-1.63	-0.8

**p<0.0001; * p<0.05

Conclusion: The data suggest that race/ethnicity and geographic disparities in kidney and liver CITs exist. Further, our results indicate that livers and kidneys are handled very differently by OPOs, physicians, and transplant centers, adjusted for graft travel distance. There is a critical need to develop graft treatment algorithms to decrease unnecessary variability in practice and to improve transplant outcomes.

NOTES

#43

MORTALITY AND END OF LIFE CARE IN OLDER TRAUMA PATIENTS WITH SEVERE TRAUMATIC BRAIN INJURY

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Introduction: The Eastern Association for the Surgery of Trauma (EAST) Practice Management Guidelines for Geriatric Trauma recommend that for patients ≥65 years with a Glasgow Coma Scale (GCS) score of ≤8 that do not substantially improve within 72 hours of injury, consideration should be given to limiting further aggressive treatment due to the likelihood of poor outcomes.

Objective: To describe the mortality, intensity of treatment, and end-of-life (EOL) care received by geriatric patients with severe TBI who died at an academic level-one trauma center.

Methods: We retrospectively reviewed all TBI patients ≥65 years old that were admitted with a GCS ≤8 (2011 to 2013). Treatment intensity was determined by hospital and ICU length of stay (LOS) and number of procedures. EOL care included code status changes, occurrence and timing of family meetings, palliative care consults, and withdrawal of life sustaining treatment. Analysis included frequencies, percentages, means, and standard deviations.

Results: Out of 74 patients, 50% (n=37) died. Of those who died, the mean age was 78 years (±7.72). The mean ISS was 22.6 (SD ± 9.2), indicating multi-system injury. These patients had an average LOS of 4.9 days and an average ICU LOS of 5 days, and had fewer procedures (mean 0.54 ± 0.99). Family meetings were documented in 86% of cases, on average of 1.7 days after admission. Almost all (92%) died after withdrawal of life-sustaining treatment (on average 3.9 days after admission). Palliative care consults were received by 14%, on average 2 days after admission. Code Status was changed in 89%, and 41% were changed to Comfort Measures Only within 24 hours of admission.

Conclusion: Older patients who died in hospital after severe TBI had a shorter mean hospital and ICU LOS and fewer procedures, suggesting that EAST Guidelines are followed in most cases. However, few patients received palliative care, signaling an important opportunity to improve EOL care. Future studies are needed to determine if adequate and appropriate palliative care is received in these challenging scenarios.

Notes

#44

INDICATIONS FOR INTUBATION AND EARLY TRACHEOSTOMY IN PATIENTS WITH STEVENS JOHNSON SYNDROME AND TOXIC EPIDERMAL NECROLYSIS

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Introduction: Stevens Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN) are life threatening diseases with skin sloughing at the dermal-epidermal junction and oftentimes associated mucositis. The reported mortality of SJS is 10% and TEN is 40%. Currently, there are no published guidelines for intubation and early tracheostomy in this patient population.

Objective: To identify indications for intubation and early tracheostomy in patients with Stevens Johnson Syndrome and Toxic Epidermal Necrolysis.

Methods: A retrospective chart review of 40 patients admitted between 2010-2015 with a diagnosis of SJS and TEN was performed. Those who were intubated and underwent tracheostomy by hospital day ten were included. Outcomes including mortality, bacteremia, pneumonia, disposition and decannulation rates were tabulated. Unpaired t tests and calculation of p values were performed.

Results: Overall, 43% of patients underwent intubation and early tracheostomy. 82% of patients had a diagnosis of TEN, 6% had SJS, and 12% had SJS-TEN overlap. All had documented oral involvement. Initial TBSA was $\geq$70% in 43% of patients. Mortality rate was 17%. There were nine cases of pneumonia and 59% of patients developed bacteremia. 50% of the patients were discharged to home with 94% being decannulated prior to discharge. We found that SCORTEN values did not correlate with our decision to perform intubation and early tracheostomy.

Conclusion: We identified the following indications for intubation and early tracheostomy in patients with Stevens Johnson Syndrome and Toxic Epidermal Necrolysis:

Documented oral involvement plus one of the following:

Initial TBSA > 70%

Progression of TBSA involved from hospital day one to hospital day three ≥ 15% TBSA

Underlying neurologic diagnosis preventing airway protection

Documented airway involvement on direct laryngoscopy

NOTES

#45

THE FORGOTTEN 12%: A CLOSER LOOK AT THE TRENDS OF INTERPERSONAL VIOLENCE AMONG URBAN FEMALES

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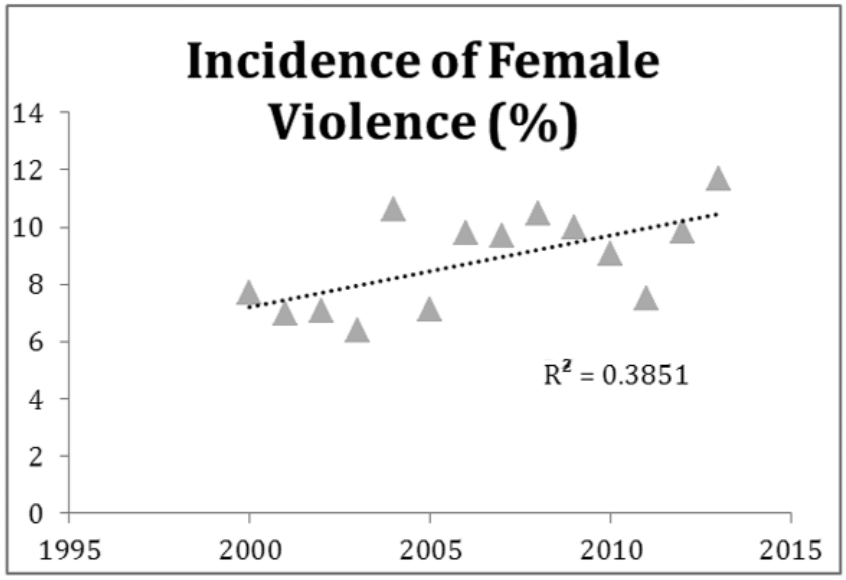
Background: Historically, interpersonal violence disproportionately affects males from minority ethnic backgrounds living in urban underserved areas. The purpose of this study was to determine the trends of interpersonal violence among females in our urban area over the past decade. We hypothesized that the incidence and severity of female violence has decreased over time.

Methods: We reviewed the trauma records between January 2000 and December 2013 of our urban, university-affiliated trauma center. Only adult victims of interpersonal violence from firearms aged 18-64 were included in this study. Victims of domestic violence were excluded. Female victims were compared to their male counterparts. Additionally, trends of violence were mapped over the study period. Chi-square analysis was used as indicated. Odds ratios generated by logistic regression analysis were used adjusting for race, age and injury severity.

Results: Five thousand ninety-eight patients were included in the study; 460 of them were females. The incidence of female violence has continued to rise over the past decade (see graph). There were no differences seen between female and male victims in terms of average age or mortality rate. Males had a higher average ISS compared to females (14.5$\pm$.02 vs. 12.39$\pm$60). Females had higher hospital LOS and were more likely to undergo non-operative management of their injuries. Amongst females, average ISS has decreased to 11.8 from a historical control of 12.83. However, compared to historical control rates, average hospital length of stay and ICU length of stay have increased (4.01 vs. 4.89; 4.8 vs. 6.63, respectively).



Conclusion: Females represent nearly 12% of victims of interpersonal violence. However, hospital and ICU length of stay amongst females has escalated compared to male counterparts or when compared to historical controls. Efforts should be aimed at development and implementation of gender-specific violence intervention programs in order to combat this phenomenon.

NOTES

#46

ABDOMINAL COMPARTMENT SYNDROME IN TRAUMATIC HEMORRHAGIC SHOCK: IS THERE A FLUID RESUSCITATION INFLECTION POINT ASSOCIATED WITH INCREASED RISK?

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Background: The volume of fluid administered during trauma resuscitation is believed to correlate with the risk of abdominal compartment (ACS) syndrome. The exact volume at which this risk rises is uncertain. We sought to establish the inflexion point for escalated risk of ACS during blunt traumatic shock resuscitation.

Methods: The *Inflammation and The Host Response to Injury* database was analyzed. Patients aged ≥18 with ACS were identified and compared with those without ACS (no-ACS). A stepwise analysis of the sum of the mean total volume of resuscitative fluid/kg body weight (μ) and incremental standard deviations (σ) vs. percentage of patients with ACS at each point was used to determine the fluid inflection point for increased ACS risk.

Results: 1976 patients were included out of which 122 (6.2%) had ACS. Compared to no-ACS, ACS patients had a higher ER lactate (5.8±3.0 vs. 4.5±2.8, $p<0.001$), INR (1.8±1.5 vs. 1.4±0.8, $p<0.001$), multiple organ failure score (9.6±2.7 vs. 7.1±2.7, $p<0.001$) central venous pressure (13.7±5.1 vs. 11.1±4.3, $p<0.001$) and mortality (37.7% vs. 14.6%, $p<0.001$). The ACS group received a higher volume of *total crystalloids/kg* (396±224 mL/kg vs. 248±141 mL/kg, $p<0.001$), *total crystalloids+colloids/kg* (397±223 mL/kg vs. 249±140 mL/kg, $p<0.001$) and *total crystalloids+colloids+blood products/kg* (498±268 mL/kg vs. 293±171 mL/kg, $p<0.001$) than the no-ACS. The proportion of patients developing ACS increased exponentially with the sum of the *mean* total volume in mL/kg and *incremental standard deviation* as follows:

498 (μ)	19.2% ACS rate	1302 (μ+3σ)	40.0% ACS rate
766 (μ+1σ)	27.8% ACS rate	1325	66.7% ACS rate
1034 (μ+2σ)	33.3% ACS rate	1350	66.7% ACS rate

This identifies the fluid inflection point for increased ACS risk as 1302 mL/kg or μ+3σ.

Conclusion: While there is a serial increase in the rate of ACS with total volume of fluid resuscitation following blunt traumatic hemorrhagic shock, there is a dramatic rise in the risk after 1302 mL/kg has been administered. This plot could serve as a guide in calculating and limiting the risk of ACS during resuscitation.

NOTES

#47

INCIDENCE AND RISK FACTORS FOR DVT AND PE FOLLOWING LIVER TRANSPLANTATION

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Introduction: Omitting chemical VTE prophylaxis in the post-liver transplant population may lead to an increased incidence of deep venous thrombosis (DVT) and/or pulmonary embolus (PE).

Objective: Assessment of risk factors for developing DVT/PE following liver transplantation.

Methods: A retrospective analysis of liver transplant recipients at one academic institution was performed, comparing patients who developed postoperative DVT/PE to an age matched population. Statistical analyses included T-tests and chi-squared tests. All statistical analyses were performed using SPSS version 20.0, or SAS version 9.3. P-values < 0.05 were considered significant.

Results: 43 of 867 patients developed a postoperative DVT/PE. Distribution of sex, ethnicities and etiologies of liver disease were similar in both groups. Patients in the study group had a significantly higher use of cryoprecipitate and fresh frozen plasma (FFP) ($p=0.047$ and $p<0.001$, respectively). The INR level of the study group was higher at 1.7 vs 1.1 ($p<0.001$) and they had a higher incidence of postoperative complications at 74% vs 46% ($p=0.05$). High-grade complication rates, including bleeding, respiratory failure and renal insufficiency, were similarly increased in the study group at 16% vs 0% ($p=0.03$).

Conclusion: The current study demonstrates that the rate of DVT/PE following liver transplantation is similar to the rate after other major operations. In this study, patients receiving an increased amount of intra-operative cryoprecipitate/FFP, or those with an elevated postoperative INR, are more likely to develop DVT/PE. Furthermore, patients experiencing a more complicated postoperative course are at the highest risk of VTE.

#48

METASTASES TO THE ADRENAL GLAND: WHO BENEFITS FROM ADRENALECTOMY?

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Introduction: The role of adrenalectomy (ADx) for adrenal metastasis remains controversial. The aim of this study is to describe the outcomes of patients with suspected adrenal metastases who underwent ADx at two academic institutions.

Methods: This is a retrospective review of 458 patients who underwent ADx between 2001 and 2014. The cohort consists of 37 patients with a previously treated primary malignancy who underwent ADx for presumed adrenal metastasis. Synchronous or metachronous lesions were determined by a 6-month cutoff from the time of primary tumor diagnosis. En-bloc adrenal resection cases were excluded.

Results: Median age was 64 years (IQR 59-70); 19 (51%) were male. Primary malignancies included: non-small cell lung (12; 32%), melanoma (7; 19%), colorectal (5; 14%), renal (4; 11%), breast (3; 8%), and others (6; 16%). The majority of patients (92%) had metachronous lesions and all but 2 (5%) had isolated adrenal disease at time of ADx. Laparoscopic ADx was performed in 28 (76%) patients, including 15 transabdominal and 13 posterior retroperitoneoscopic. Median tumor size was 4 cm (IQR 3-5); 28 (76%) patients obtained a margin-negative resection. Positive margin status and adrenal capsule disruption were associated with receipt of adjuvant radiotherapy ($p<0.01$ and $p=0.02$, respectively). Pathology confirmed adrenal metastasis in 32 (87%) patients; the remaining 5 (2 with adrenocortical carcinoma, 3 with adrenal adenomas) and 10 with follow-up <6 months were censored from survival analysis. For the 22 uncensored patients, at median follow-up of 21 months (IQR 14-37), metastatic disease had progressed in 12 (55%).

The median disease-free interval (DFI) was 8 months (IQR 7-24). A shortened DFI was associated with positive margins ($p=0.03$), tumor size $\geq$6 cm ($p<0.01$), and adjuvant radiotherapy to the adrenal bed ($p=0.03$). Overall, 14 (64%) patients were alive, including 7 (32%) with no evidence of disease. Median overall survival (OS) was 29 months (IQR 16-37). Decreased OS was associated only with adrenal capsule disruption ($p=0.05$). There were no differences in margin status, capsular disruption, DFI, or OS by surgical approach (open vs. laparoscopic or transabdominal vs. posterior retroperitoneoscopic).

Conclusion: In patients with adrenal metastases and limited systemic disease, ADx can be considered as a therapeutic option. Whether to perform an open or laparoscopic approach should take into account the ability to achieve a margin-negative resection with avoidance of capsular disruption in order to optimize disease-free and overall survival.

Notes

#49

PROCEDURAL VOLUME AND SURVIVAL AFTER LUNG TRANSPLANTATION IN THE UNITED STATES: A POST LUNG ALLOCATION SCORE (LAS) ANALYSIS

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Objective: We sought to evaluate the effect of center volume on patient survival following lung transplantation (LT) in the United States.

Methods: We performed a retrospective analysis on nationwide data from the Scientific Registry of Transplant Recipients (SRTR) provided by United Network for Organ Sharing (UNOS) pertaining to LT recipients transplanted between 2005 and 2013. Centers were categorized into four groups as follows based on their annual volume: <25, 25-50, 51-75, and >75 LTs. Baseline characteristics were compared, Kaplan-Meier analysis was used to estimate survival with log-rank test, with pair-wise comparisons and Bonferroni correction to account for multiple comparisons.

Results: A total of 13,354 adult recipients underwent LT during the study period. Of these, 1046 (7.8%) patients were transplanted in centers with volume <25, 3932 (29.4%) in centers with volume 25-50, 2564 (19.2%) in centers with volume 51-75, and 5812 (43.5%) in centers with volume >75. Mean recipient age and body mass index (BMI) were each higher in centers with higher volume. The lowest volume centers were most likely to transplant recipients with a diagnosis of COPD whereas higher volume centers were more likely to transplant patients with interstitial pulmonary fibrosis (IPF). Higher volume centers had a greater proportion of patients on mechanical ventilation (MV) and were more likely to use older donors, with a smoking history. Survival was poorest in the lowest volume centers (1-year 78.5 v 85.8 and 5-year 48.7 v 56.5 respectively).

Conclusion: Post-LT survival in low volume centers is significantly lower than in high volume centers. Improved understanding of this relationship will afford further dissection of the important center variables which contribute to improving outcomes broadly.

#50

DEMOGRAPHICS AND DISPARITIES IN SUB-STERNAL GOITERS IN THE U.S.: A DISTINCT ENTITY

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Introduction: Disparities that exist between patients with sub-sternal goiters and non-sub-sternal goiters in the United States have yet to be thoroughly studied.

Objective: To elucidate the disparities that exist in patient-level risk factors for sub-sternal versus non-sub-sternal goiters.

Methods: The National Inpatient Sample database was used to analyze patients who underwent sub-sternal thyroidectomy years 2000-2010, and compare to those who underwent complete/unilateral thyroidectomy for non-sub-sternal goiter. Odds ratios were determined to assess the likelihood of having sub-sternal thyroidectomy based on demographic variables.

Results: A total of 110,889 patients had a thyroidectomy for goiter years 2000-2010 (5,525 sub-sternal thyroidectomy and 105,364 not sub-sternal thyroidectomy). Sub-sternal thyroidectomy patients had a higher incidence of being Black (19.1% vs. 12.4%, respectively), male (23.5% vs. 19.9%), older (mean age of 57.8 years vs. 51.9 years), and having Medicare as their primary payer (37.6% vs. 24.1%) than the complete/unilateral thyroidectomy group. After adjusting for race, sex, age, primary payer, hospital region and hospital teaching status, black patients were 78% more likely (OR: 1.78; 95% CI: 1.63 - 1.93), Hispanic patients 19% more likely (OR: 1.19; 95% CI: 1.06 - 1.33), and Asian patients 18% less likely (OR: 0.82; 95% CI: 0.68 - 0.99) to have undergone sub-sternal thyroidectomy as compared to white patients. Females were 14% less likely to have undergone sub-sternal thyroidectomy as compared to males (OR: 0.86; 95% CI: 0.80 - 0.93). For each 1 year increase in age, a patient is expected to have a 2.4% increase in the odds of having sub-sternal versus non-sub-sternal goiter thyroidectomy (OR: 1.02; 95% CI: 1.02 - 1.03).

Conclusion: Sub-sternal goiters present a distinct type of goiter with an identifiable set of patient-level risk factors, including race/ethnicity, gender, and age.

Notes

#51

MINORITY RACE AND LOWER SOCIO-ECONOMIC STATUS ADVERSELY AFFECT STOMA CLOSURE RATES

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Introduction: Many temporary stomas are never reversed, leading to significantly worse quality of life. Recent evidence suggests a lower rate of reversal among minority patients.

Objective: To test for disparities in national stoma closure rates by race/ethnicity, medical insurance status and household income.

Methods: Five years of data from the Nationwide Inpatient Sample was used to identify the annual rates of stoma formation and annual rates of stoma closure. Stomas labeled as 'permanent' or those created secondary to colorectal cancers were excluded. Temporary stoma closure rates were calculated and differences were tested with the Chi square test. Separate analyses were performed by race/ethnicity, insurance status and household income. Nationally representative estimates were calculated using discharge level weights.

Results: 76,551 stomas were created annually (46% colostomies, 54% ileostomies) and 35% of these were never closed. ***[See Table]***

Conclusion: Stark disparities exist in national rates of stoma closure. The lack of access to surgical health care amongst patients of minority race and low income status needs to be addressed.

Variable	Category	Stomas created/yr (n)	Stomas closed/yr (n)	Stoma reversal rate (%)	P value
Race	White	50,453	33,865	67.1	<0.01
	Black	7,452	4,190	56.2	
Insurance	Insured	25,843	22,807	88.3	<0.01
	Uninsured	3,008	1,888	62.7	
Income Quartile	Lowest	19,394	11,866	61.2	<0.01
	2nd	19,706	12,640	64.1	
	3rd	18,938	12,466	65.8	
	Highest	16,916	12,143	71.8	

NOTES

#52

RACIAL DISPARITIES IN THE TYPE OF POST-MASTECTOMY RECONSTRUCTION CHOSEN

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Background: Racial disparities remain for women undergoing immediate breast reconstruction (IBR) following mastectomy. Understanding patterns of racial disparities in IBR utilization may present opportunities to tailor policies aimed at optimizing care across racial groups. The aim of this study is to determine if racial disparities exist for the types of IBR chosen.

Methods: A national, retrospective cohort study using the 2005-2011 National Surgical Quality Improvement Program (NSQIP) database. Primary outcome was odds by race for type of IBR following mastectomy: prosthetic, pedicled-transfer autologous tissue, or free-transfer autologous tissue. Secondary outcome was trends in IBR rates over time.

Results: Thirty-seven percent of women undergo IBR following mastectomy. Prosthetic reconstruction (84.4%) was the most common form of IBR compared to pedicled-autologous reconstruction (15.4%) and free-transfer autologous reconstruction (4.9%), $p<0.001$. In multivariate analysis, minorities had lower odds of undergoing IBR compared to Whites (OR 0.37 for Asians, 0.57 for Blacks and 0.64 for Hispanics, all $p<0.001$). Compared to Whites, Hispanic (OR 0.70) and Blacks (0.53) were less likely to utilize prosthetic reconstruction and more likely to utilize free-transfer autologous reconstruction (OR 1.66 for Hispanics, 2.13 for Blacks), all $p<0.001$. Racial disparities persisted from 2005-2011; as minority patients were less likely to undergo IBR than Whites ($p<0.001$).

Conclusions: Utilization of IBR may be a sensitive measure of disparities in access to high-quality care as well as underlying cultures. Strategies aimed at reducing racial disparities in IBR should be tailored to specific patterns of disparities among Asian, Black, and Hispanic women.

#53

INSURANCE STATUS OF CADAVERIC ORGAN DONORS

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Introduction: Critics believe there is a disparity between organ donation and allocation based on insurance status. This study examines the insurance status of transplant donors using chart review of an organ procurement organization (OPO) for Northern Illinois and Northwestern Indiana.

Methods: Gift of Hope (GOH) is a nonprofit OPO for patients in Northern Illinois and Northwestern Indiana. We performed a retrospective chart review of all patients whose organs were procured from GOH from January 2010 to December 2012. From these charts, we collected data on age, sex, race, citizenship and insurance status of all donors during this three-year period. Data were evaluated using Fisher's exact test. Statistical significance was assessed using alpha=0.05. All analyses were conducted using R statistical software.

Results: There were 816 organ transplant donors identified and evaluated for transplant purposes by GOH from January 2010 to December 2012. A majority (59%) of patients were male. Caucasians represented 59% (481) of donors, African Americans 27% (218), Latinos 11% (94), Asians 2% (14) and 1% (9) were from other nationalities. The median donor age was 45 with a range of 1 month to 85 years old. Donor insurance status was not attainable in 128 patients (16%). Of the patients whose insurance status was available, 70% (485) of donors were insured and 30% (203) of donors had no insurance. African Americans ($p=.017$) and Latino ($p<.0001$) donors were less likely to have insurance compared to their Caucasian counterparts. Approximately 3% (24) of the donors were identified in the chart as non-United States citizens.

Conclusion: Society solicits organ donations from all of its members; however, there is a disparity between eligibility for organ donation versus eligibility for organ transplantation. Although insurance is mandatory to receive an organ transplant, this study demonstrates that many donors do not have health insurance. Efforts should be made to eliminate financial disparities to increase the eligibility for organ transplantation.

Notes

#54

THE DIVERSE SURGEONS' INITIATIVE (DSI): LONGITUDINAL ASSESSMENT OF A SUCCESSFUL NATIONAL PROGRAM

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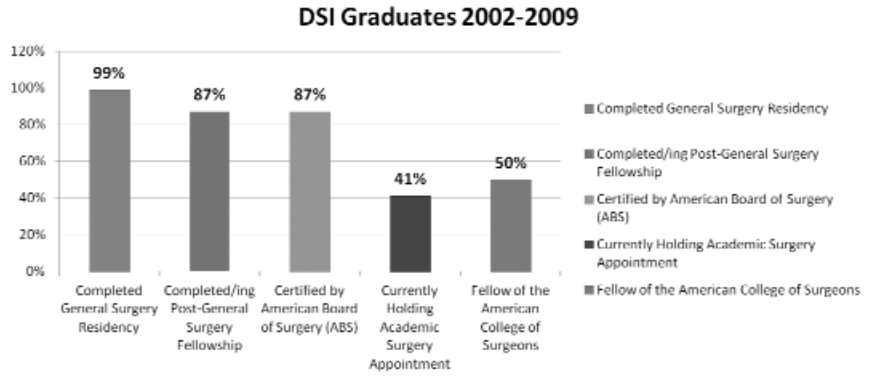
Background: The Diverse Surgeons Initiative (DSI) is a program that was created to provide underrepresented minority (URM) surgical residents with the clinical knowledge and minimally invasive surgical (MIS) skills necessary to excel in surgical residency and successfully transition into surgical practice. The early success of the graduates of the program was published; however, a more longitudinal assessment of the program was suggested and warranted. This study provides a five-year follow-up of the 76 physicians that participated in the DSI from 2002-2009 to determine if the trend towards fellowship placement and academic appointments persisted. Additionally, this extended evaluation yields an opportunity to further assess these young surgeons' professional progress and contributions to the field.

Study Design: The most current professional development and employment information was obtained for the 76 physicians that completed the DSI from 2002-2009. The percentage of DSI graduates completing surgical residency, obtaining subspecialty fellowships, attaining board certification, receiving fellowship in the American College of Surgeons, contributing to the peer-reviewed literature, acquiring academic faculty positions, and ascending to professional leadership roles were calculated and compared to the original assessment.

Results: Of the 76 DSI graduates, 99% completed general surgery residency. Of those eligible, 87% completed subspecialty fellowships, 87% were board certified, 50% received fellowship in the American College of Surgeons, 76% had contributed to the peer-reviewed literature, 41% had obtained faculty positions, and 18% held local, regional, or national professional leadership positions.



Conclusion: This longitudinal analysis has revealed sustained success of the DSI in preparing URM residents to excel in their training and transition into practice, obtain postsurgical fellowships, acquire faculty appointments, and contribute to the advancement of the field of surgery.

NOTES

#55

MULTI-MORBIDITY AND ACCESS TO MAJOR CANCER SURGERY AT HIGH-VOLUME HOSPITALS IN A REGIONALIZED ERA

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Background: The Institute of Medicine has recently prioritized access of quality cancer care to vulnerable persons including multi-morbid patients. Despite promotional efforts to regionalize major surgical procedures to high volume hospitals (HVH), little is known about change in access to HVH over time among multi-morbid patients in need of major cancer surgery. We performed a time trend appraisal of access of multi-morbid persons to HVH for major cancer surgery within a large nationally representative cohort.

Methods: We identified 168,934 patients who underwent six major cancer surgeries from the Nationwide Inpatient Sample (1998-2010). Comorbidities were identified using Elixhauser's method. HVH were defined as hospitals of highest procedure volumes that treated 1/3 of all patients. Logistic regression models and predictive margins were used to assess the adjusted effects of comorbidity on receiving major cancer surgeries at HVH.

Results: 45.7% of patients had ≥ 2 comorbidities. Multi-morbidity predicted decreased access to HVH for esophagectomy, total gastrectomy, pancreatectomy, hepatectomy and proctectomy, but not for distal gastrectomy, after controlling for covariates (Table). A comorbidity level by year interaction analysis also showed that these disparities remained unchanged across five procedures except for pancreatectomy (p=0.03), where the predicted difference in probability of receiving a pancreatectomy at HVH between patients with multiple comorbidities and their healthier counterparts decreased from 7.5% in 1998 to 3.6% in 2010.

Table: Adjusted Odds Ratios Associated with Comorbidity Level for Surgery at HVH (NIS 1998-2010).

Co-morbidity Count (ref = 0)	Esophageal (N = 8,655)	Distal Gastric (N = 27,018)	Total Gastric (N = 13,855)	Liver (N = 7,851)	Pancreatic (N = 27,422)	Rectal (N = 84,133)
	Odds Ratio (95% CI)					
1	0.84 (0.74, 0.95)	1.05 (0.97, 1.14)	0.90 (0.81, 1.00)	0.86 (0.76, 0.97)	0.93 (0.87, 1.00)	0.92 (0.89, 0.96)
2	0.80 (0.70, 0.92)	1.01 (0.92, 1.10)	0.80 (0.71, 0.89)	0.85 (0.74, 0.98)	0.81 (0.75, 0.87)	0.86 (0.82, 0.90)
3+	0.66 (0.57, 0.76)	0.93 (0.85, 1.01)	0.67 (0.60, 0.76)	0.76 (0.66, 0.89)	0.69 (0.63, 0.74)	0.79 (0.75, 0.83)

Conclusion: In this large 12-year time trend study, multi-morbid cancer patients have sustained low access to HVH for major cancer surgery across many oncologic resections. These results continue to reinforce and highlight the need for policy targeted research and intervention aimed at improving these access gaps.

NOTES

#56

MORBID OBESITY IS AN INDEPENDENT RISK FACTOR FOR POSTOPERATIVE RENAL DYSFUNCTION IN YOUNG ADULTS: A REVIEW OF THE ACS-NSQIP DATABASE

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Introduction: Studies show that obesity increases the risk of chronic renal dysfunction in the general population, but there is little information on its acute effects in the surgical population. The existence of such a relationship could identify obesity as an independent predictor of post-operative renal dysfunction.

Objective: Examine the association between body mass index (BMI) and postoperative renal function in surgical patients using a national database.

Design: A retrospective analysis of the ACS-NSQIP (2005-2010) dataset.

Methods: 119,142 patients 18-35 years old with a BMI $\geq$ 18 kg/m^2 and a documented preoperative creatinine measurement were included in the study. Patients were classified into standard BMI categories. eGFR was calculated using the MDRD (Modified Diet for Renal Disease) formula. The association between BMI and preoperative eGFR was analyzed. Outcomes measured included postoperative renal failure and renal insufficiency. Multivariate regression analysis was performed adjusting for standard BMI categories, demographics, presence of hypertension, diabetes, cardiac, pulmonary co-morbidities, and smoking status.

Results: On multivariate analysis, when compared to the eGFR of the normal weight category (109.4 mL/min/1.73 m^2), there was a reduction in eGFR among the overweight (-3.4 mL/min/1.73 m^2, $p<0.001$), obese class I (-3.9 mL/min/1.73 m^2, $p=0.001$), and obese class II (-5.3 mL/min/1.73 m^2, $p<0.001$). Although there was a reduction in eGFR among the morbidly obese (-5.05 mL/min/1.73 m^2), it was not significant ($p=0.638$). The odds of a renal complication (postoperative progressive renal insufficiency and acute renal failure) was significantly higher in the morbidly obese (OR=2.01 95% CI 1.07-3.76, $p=0.029$).

Conclusion: Patients with BMI greater than 40 were more likely to develop renal complications postoperatively. Thus, BMI can serve as an independent predictor of renal dysfunction.

Notes

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MEDICAID BENEFICIARIES UNDERGOING COMPLEX SURGERY AT QUALITY CARE CENTERS: INSIGHTS INTO THE AFFORDABLE CARE ACT

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Background: Medicaid beneficiaries do not have equal access to high quality care including access to high volume centers for complex surgical procedures. We hypothesize that access to surgical services for the Medicaid population varies within the same hospital, with a large gap between those receiving emergency general vs. complex surgery.

Methods: Using the National Inpatient Sample 1998-2010, we identified hospitals that performed at least 10 pancreatic resections/year (as a proxy for complex surgery). We compared the percentage of Medicaid patients receiving appendectomies vs. pancreatic resections within each hospital. Multivariable logistic modeling was used to identify characteristics associated with increased Medicaid gap.

Results: 603 hospitals were included; most were urban (98%) and teaching (88.1%). Median percentages of those with Medicaid receiving appendectomy and pancreatic resection were 11.9% (IQR: 5.6%-19.8%) and 6.5% (IQR: 0-15.3%), respectively. Teaching hospitals (OR=7.9, 95% CI: 1.1-58.5) and hospitals that performed ≥ 40 pancreatic resections in the year (OR=2.1, 95% CI: 1.2-3.6) were more likely to have a higher Medicaid gap.

Conclusions: Gaps exist between the percentage of Medicaid patients receiving emergency general surgery vs. more complex surgical care at the same hospital, and are particularly exaggerated in teaching hospitals and hospitals with very high volume. While targeted increase in intra-hospital access for complex cases at these institutions may serve as a potential inlet strategy, it is unclear if the current Medicaid expansion program will truly increase access to specialized high quality surgical care.

CONSTITUTION

Constitution of the Society of Black Academic Surgeons

ARTICLE I: Designation

The name of the organization shall be the Society of Black Academic Surgeons (SBAS). It shall be incorporated as a non-profit organization and have no capital stock or shareholders. The address of the President will be the official address of the Society.

ARTICLE II: Objective

The paramount objectives of the Society of Black Academic Surgeons shall be supportive of and consistent with the enhancement of the academic surgical community both nationally and internationally. The specific objectives are as follows:

A. Identify and promote professional and intellectual exchange among surgeons and scientists involved in their related fields.

B. Promote the participation of minority surgeons and scientists in the activities of all academic surgical organizations.

C. Stimulate and assist government, private industry and voluntary organizations to develop and promote programs to increase the participation of minority surgeons in the academic community.

D. Encourage and assist minority surgeons to conduct original research in both the basic and clinical sciences.

E. Support and strengthen the surgical section programs of the National Medical Association.

ARTICLE III: Members

Active members will be designated as Fellows of the Society of Black Academic Surgeons and will be comprised of reputable surgeons. All Fellows will be elected to membership according to the Constitution and Bylaws. Termination of a member by resignation, death, or any other manner will end all rights and privileges in the Society. None of the assets or privileges will be transferable to any representative of a member's estate.

ARTICLE IV: Officers/Council

The Officers of the Society shall be President, President-Elect, Secretary and Treasurer. The President and President-Elect shall be elected for a one-year term; the President-Elect shall automatically become President. The Secretary and the Treasurer shall be elected for three-year terms. This slate of officers, along with two Fellows (appointed by the President) will be designated as the Executive Council.

ARTICLE V: Organization Structure

A. The Society's organizational structure will consist of General Membership, Officers, Executive Council, and Standing Committees. The span of authority, rights and privileges shall be based on the Constitution and Bylaws.

B. The duties, powers and regulations governing the Society's organizational structure shall be defined and delineated in the Society's Bylaws.

ARTICLE VI: Meetings

A. The Society shall hold an annual scientific and business meeting, the time and place determined by the Executive Council at least two years in advance of the meeting. Only members of the Society may attend the business meeting.

ARTICLE VII: Rules

The conduct of all Society meetings including those of the Executive Council shall be governed by the Bylaws of the Society and Robert's Rules of Order.

ARTICLE VIII: Governance

Section 1 The Society shall be governed by this Constitution and Bylaws, the latter document to provide specific direction for the organization, administration and services of the Society.

Constitution of the Society of Black Academic Surgeons

(CONTINUED)

Section 2 The Society's Constitution and Bylaws shall be consistent with provisions and content of any organizational charter or certificate of incorporation the Society may propose and/or execute.

ARTICLE IX: Certificate of Incorporation

Section 1 The Society may propose and execute an organizational charter or certificate of incorporation in accordance with all local, state and federal (U.S.) regulations, codes and laws.

Section 2 The certificate of incorporation shall not vitiate any provision of this Constitution or the Society's Bylaws, unless a court of competent jurisdiction expressly rules, orders or directs otherwise. If any such provision or the certificate, in whole or part, is held to be unlawful, only the unlawful provision or certificate will be null and void. The remaining provisions and/or certificate, in whole or part, will continue in effect as valid.

Section 3 The certificate of incorporation shall not govern the application and administration of the Constitution or the Society's Bylaws.

Section 4 Notwithstanding any other provisions of these articles, the organization is organized exclusively for one or more of the purposes as specified in Section 501C (3) of the Internal Revenue Code of 1954, and shall not carry on any activities not permitted to be carried on by an organization exempt from Federal income tax under IRC 501C(3) or corresponding provisions of any subsequent Federal tax laws.

Section 5 No part of the net earnings of the organization shall inure to the benefit of a member or any private individual (except that reasonable compensation may be paid for services rendered to or for the organization), and no member of the organization or any private individual shall be entitled to share in the distribution of any of the organization's assets on dissolution of the organization.

Section 6 No substantial part of the activities of the organization shall be carrying on propaganda, or otherwise attempting to influence legislation [except as otherwise provided by IRC 501C(h)] and does not participate in, or intervene in (including the publication or distribution of statements), any political campaign on behalf of any candidate for public office.

Section 7 In the event of dissolution, all of the remaining assets and property of the organization shall after payment of necessary expenses thereof be distributed to such organizations as shall qualify under section 501(c)(3) of the Internal Revenue Code of 1986 and approved by the Executive Committee.

Section 8 In any taxable year in which the corporation is a private foundation as described in IRC 509(a), the organization shall distribute its income for said period at such time and manner as not to subject it to tax under IRC 4942, and the organization shall not [a] engage in any act of self-dealing as defined in IRC 4941(d), retain any excess business holdings as defined in IRC 4943(c), [b] make any investments in such a manner as to subject the organization to tax under IRC 4944, or [c] make any taxable expenditures as defined in IRC 4945(d) or corresponding provisions of any subsequent Federal tax laws.

ARTICLE X: Funds and Expense

Funds for the Society may be raised by approved dues and/or in any manner approved initially by the Executive Committee and the organization. Funds may be appropriated by the Executive Council to

Constitution of the Society of Black Academic Surgeons

(CONTINUED)

defray the expense of the Society to carry out the necessary functions, and for any other purpose approved by the Council; provided, however, that no funds or assets shall be used to inappropriately benefit one member of the unit.

ARTICLE XI: Amendments

This Society, at any annual business meeting of the Fellows, may amend any Article of this Constitution by a two-thirds majority of the Fellows present, provided that a copy of the proposed Amendment has been furnished to each active Fellow at least thirty days in advance of the meeting.

ARTICLE XII: Effective Date

These revised Bylaws shall take effect immediately upon acceptance by a simple majority of the membership and extend indefinitely, subject to alteration, amendment or repeal in whole or part, as specifically provided in the Constitution.

BYLAWS: SOCIETY OF BLACK ACADEMIC SURGEONS

Section 1 Annual Meeting

The Society of Black Academic Surgeons shall meet annually at such time and place as designated by the Executive Council.

Section 2 Quorum

The Fellows present shall constitute a quorum for business. All questions before the Society shall be determined by the vote of the majority of those present at any regular business meeting.

Section 3 Fiscal Year

The fiscal year shall begin on January first. The annual dues of each member shall be determined by the Executive Council with approval of the membership, payable on January first of each year. Each member of the Society who reaches the age of sixty-five years shall automatically have his dues rescinded.

Section 4 Parliamentary Procedure

Robert's Rules of Order shall govern the sessions of the Society.

Section 5 Membership

A. Eligibility

1. An individual who occupies a faculty position in a university department of surgery or its affiliated hospitals.
2. An individual who occupies a faculty position in a free-standing surgical residency program.
3. An investigator or teacher in an academic department of surgery or an ACGME-approved surgery program.
4. An individual in a surgical specialty (Neurosurgery, Orthopedics, Urology, Otorhinolaryngology, Plastic and Reconstructive) shall be eligible for membership.

B. Membership Certification

Membership in the Society shall include the following categories: Active, Senior, Associate, and Honorary.

1. Active Fellow: Any person who is a Doctor of Medicine (M.D.) (or equivalent) or Doctor of Philosophy (Ph.D.) (or equivalent) who shares an interest in the purpose of the Society and is approved by the Fellowship Committee. Only active members have the right to vote and hold office.
2. Senior Fellow: Any active Fellow upon reaching the age of seventy years shall become a Senior Fellow. Senior Fellows are exempt from paying dues, and shall continue to vote, but shall not have the privilege of holding office.

Constitution of the Society of Black Academic Surgeons

(CONTINUED)

3. Associate Fellow: Any surgical resident in good standing in an ACGME-approved residency program who desires to pursue an academic surgical career.

4. Honorary Fellow: Any person who is a Doctor of Medicine (M.D.) (or equivalent) or Doctor of Philosophy (Ph.D.) (or equivalent) and has distinguished himself/herself by outstanding achievement and dedication to the objectives of the Society. Honorary Fellows shall pay no dues or initiation fees and may not vote or hold elected office.

Section 6 Responsibilities of the Officers

A. It shall be the duty of the President to (1) preside at all meetings of the Society, (2) give the deciding vote, (3) ensure that Robert's Rules of Order and decorum are properly enforced in all deliberations of the Society, and (4) sign the approved proceedings of each meeting.

B. In the absence of the President, the President-Elect shall preside, and in his/her absence the Secretary.

C. It shall be the duty of the Secretary to (1) keep a true and correct record of the proceedings of the Meetings, (2) preserve all books, papers, and articles belonging to the Society, (3) keep an account of the Society with its Fellows, and (4) keep a register of the Fellows with the dates of their admission and places of residence. The Secretary shall report unfinished business at previous meetings requiring action, and attend to such other business as the Society may direct. The Secretary shall assist with the correspondence of the Society.

D. It shall be the duty of the Treasurer to collect the dues of the Society and make disbursements for expenses. The Treasurer shall present an annual report of the financial condition of the Society. The accounts of the Treasurer shall be audited once yearly by a committee appointed by the President.

Section 7 Vacancies, Resignations and Removal from Membership

A. Vacancies

Vacancies occurring in the offices of the Society, other than that of the President, shall be filled by appointment by the President until the next meeting. The President shall appoint members to all Committees.

B. Resignations

Any Fellow may resign from the Society by delivering a written resignation to the President or Secretary.

C. Expulsions

The removal of a Fellow from the Society shall be based on gross negligence or poor character as determined by the Executive Council and a majority of the full membership.

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Honorary Members

SBAS gives Honorary Fellowships to outstanding surgeons who have mentored minority surgeons and championed diversity in surgery.

Honorary Fellow Award Recipients (Chronologically Ordered):

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Previous SBAS Meetings

1989 Duke University, Chapel Hill, NC
1991 Harvard University, Boston, MA
1993 UC Davis-East Bay (Meeting held in Napa Valley, CA)
1994 University of Texas Medical Branch, Galveston, TX
1995 University of North Carolina, Chapel Hill, NC
1996 University of Colorado, Denver, CO
1997 State University of New York, Buffalo, NY
1998 Howard University College of Medicine, Washington, DC
1999 University of Louisville, Louisville, KY
2000 Charles R. Drew University, Los Angeles, CA
2001 Harvard University, Boston, MA
2002 Morehouse School of Medicine, Atlanta, GA
2003 University of Alabama at Birmingham, Birmingham, AL
2004 Howard University, Washington, DC
2005 University of Pittsburgh, Pittsburgh, PA
2006 University of Cincinnati, Cincinnati, OH
2007 Rush University Medical Center, Chicago, IL
2008 Cleveland Clinic, Cleveland, OH
2009 University of Washington, Seattle, WA
2010 Duke University, Chapel Hill, NC
2011 Massachusetts General Hospital, Boston, MA
2012 Johns Hopkins School of Medicine, Baltimore, MD, and Howard University, Washington, DC
2013 University of Mississippi, Jackson, MS
2014 Temple University and The University of Pennsylvania, Philadelphia, PA

Future SBAS Meetings

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