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Original Scientific Articles

721 Cyst Fluid Biosignature to Predict Intraductal Papillary Mucinous Neoplasms of the Pancreas with High Malignant Potential

Ajay V Maker, MD, FACS, Vincent Hu, PhD, Shrihari S Kadkol, MD, PhD, Lenny Hong, MS, William Brugge, MD, Jordan Winter, MD, FACS, Charles J Yeo, MD, FACS, Thilo Hackert, MD, Markus Büchler, MD, FACS, Rita T Lawlor, PhD, Roberto Salvia, MD, Aldo Scarpa, MD, Claudio Bassi, MD, FACS, Stefan Green, PhD

Current standard-of-care clinical guidelines are unable to accurately identify patients with intraductal papillary mucinous neoplasms of the pancreas at high risk of pancreatic cancer. Therefore, a single-platform biosignature to accurately predict intraductal papillary mucinous neoplasms with high malignant potential was created.

730 Enhancing Parathyroid Gland Visualization Using a Near Infrared Fluorescence-Based Overlay Imaging System

CME

Melanie A McWade, PhD, Giju Thomas, PhD, John Q Nguyen, PhD, Melinda E Sanders, MD, Carmen C Solórzano, MD, FACS, Anita Mahadevan-Jansen, PhD

A near infrared autofluorescence-based overlay imaging system was developed to improve parathyroid visibility directly in the surgical field without requiring display monitors or contrast agents. The device detects near infrared signal from parathyroid tissue and projects a visible image back onto it and enhances its visibility for surgeons.

744 Randomized Controlled Trial Comparing White Light with Near-Infrared Autofluorescence for Parathyroid Gland Identification During Total Thyroidectomy

Fernando Dip, MD, FACS, Jorge Falco, MD, FACS, Silvina Verna, MD, Marcos Prunello, MD, Matias Loccisano, MD, Pablo Quadri, MD, Kevin White, MD, PhD, Raul Rosenthal, MD, FACS

In a randomized controlled trial with 170 patients, patients whose thyroidectomy was performed under near-infrared light had parathyroid glands detected earlier intraoperatively, before thyroid dissection vs afterward, and were only one-tenth as likely to have a postoperative day 1 serum calcium level ≤ 7.5 mg/dL.

752 Whose Benchmark Is Right? Validating Venous Thromboembolism Events Between Trauma Registries and Hospital Administrative Databases

Todd A Miano, PharmD, MSCE, FCCM, Grigor Abelian, PharmD, Mark J Seamon, MD, FACS, Kristen Chreiman, MSN, RN, CCRN, TCRN, Patrick M Reilly, MD, FACS, Niels D Martin, MD, FACS, FCCM

We compared the validity of venous thromboembolism diagnoses found in the trauma registry and administrative databases of our institution. There was considerable discordance between databases, with substantial numbers of venous thromboembolism found in only the administrative or the registry database. These findings have implications for venous thromboembolism-based quality measures.

760 Trauma Resuscitation Consideration: Sex Matters

Julia R Coleman, MD, MPH, Ernest E Moore, MD, FACS, Jason M Samuels, MD, Mitchell J Cohen, MD, FACS, Angela Sauaia, MD, PhD, Joshua J Sumislawski, MD, Arsen Ghasabyan, MPH, James G Chandler, Anirban Banerjee, PhD, Christopher C Silliman, MD, PhD, Erik D Peltz, DO, FACS

In severely injured trauma patients, female patients were more hypercoagulable than male patients by thrombelastography. In female patients, measurements of clot propagation and strength were higher and hyperfibrinolysis and prolonged clot formation occurred less frequently. In the setting of depressed clot propagation and strength, female sex conferred a survival benefit.

769 Multimodal Analgesia and Opioid Use in Critically Ill Trauma Patients

Kasey L Hamrick, PharmD, Carl A Beyer, MD, Jin A Lee, PharmD, Christine S Cocanour, MD, FACS, FCCM, Jeremiah J Duby, PharmD

Previous studies have evaluated the impact of multimodal analgesia in the perioperative population. In this cohort study, an order set emphasizing multimodal analgesia helped change the culture of pain medication ordering and significantly decreased cumulative opioid exposure in critically ill trauma patients.

776 Clinical Value of Hernia Mesh Pathology Evaluation**CME**

Negin Fadaee, AA, Laura Mazer, MD, Rajeev Sharma, MD, Isabel Capati, RN, BSN, Bonnie Balzer, MD, PhD, Shirin Towfigh, MD, FACS

Implanted hernia mesh pathology will show foreign-body reaction, fibrosis, and chronic inflammation, regardless of clinical indication for mesh removal. We recommend submitting mesh specimen for gross evaluation only, as there is extra cost with no clinical value to microscopic evaluation.

782 Evaluating Surveillance Patterns after Chemoradiation-Only Compared with Conventional Management for Older Patients with Rectal Cancer

C Tyler Ellis, MD, MSCR, Ashley L Cole, PhD, MPH, Hanna K Sanoff, MD, MPH,
Sharon Hinton, MPA, Stacie B Dusetzina, PhD, Karyn B Stitzenberg, MD, MPH, FACS

Providers should be aware of improvements to post-treatment monitoring, particularly for patients receiving chemoradiation only, because local–regional recurrence rates are expected to be higher. The need for surveillance should be factored into discussions about the risks of the chemoradiation-only approach.

792 Value of Axillary Ultrasound after Negative Axillary MRI for Evaluating Nodal Status in High-Risk Breast Cancer**CME**

Tariq Almerey, MD, Diego Villacreses, MD, Zhuo Li, MS, Bhavika Patel, MD,
Michelle McDonough, MD, Tammeza Gibson, PA-C, Santo Maimone, MD,
Richard Gray, MD, FACS, Sarah A McLaughlin, MD, FACS

The routine use of axillary ultrasound after negative MRI is low yield, and therefore may be unnecessary in breast cancer patients undergoing neoadjuvant therapy. Eliminating the redundancy of performing this ultrasound can reduce unneeded patient workups and anxiety, limit strain on resources in radiology, and reduce delays to operation and treatment.

798 Resident-Sensitive Processes of Care: Impact of Surgical Residents on Inpatient Testing

Clifford C Shekter, MD, Jeffrey Jopling, MD, Qian Ding, MS,
Amber W Trickey, PhD, MS, CPH, Todd Wagner, PhD, Arden M Morris, MD, MPH, FACS,
Mary T Hawn, MD, MPH, FACS

Surgical residents had an impact on the frequency of inpatient testing adjusting for attending, case, and patient-level variables. There was greater variation in laboratory testing compared with imaging, yet residents had small contributions to the total variation in testing. Our risk-adjusted model could function to educate high-users on practice patterns.

Letters**807** Firearms and Alcohol

Lewis Zulick, MD, MMM, FACS

807 Integration of Transversus Abdominis Plane Block in the Multimodal Analgesia for Outpatient General Surgical Procedures

Hytham KS Hamid, MRCSEd, Iqbal Z Khan, FRCSI

808 Surgical Repair of Occult Inguinal Hernia?

Adam J Kaplan, MD, FACS, Robert P Hinks, MD, FACS, Daniel W Bailey, MD,
Elaine Cleveland, MD, John S Berry, MD

809 Occult Inguinal Hernias Matter: In reply to Kaplan and colleagues

Shirin Towfigh, MD, FACS, Joseph Miller, MD

- 810** Acute Care Emergency General Surgery Model: Assigning Priority
Badri M Shrestha, MD, FRCS, FACS

- 811** Pasireotide for the Prevention of Postoperative Pancreatic Fistula: A Debate Not To Close Too Early
Maurizio Zizzo, MD, Lara Ugoletti, MD, Magda Zanelli, MD, Loredana De Marco, MD, Valerio Annessi, MD, Claudio Pedrazzoli, MD

Continuing Medical Education Program

- 812** Enhancing parathyroid gland visualization using a near-infrared fluorescence-based overlay imaging system. McWade MA, Thomas G, Nguyen JQ, et al.

Value of axillary ultrasound after negative axillary MRI for evaluating nodal status in high-risk breast cancer. Almercy T, Villacreses D, Li Z, et al.

Additional Articles for May 2018 Online at <http://jacscme.facs.org>

Clinical value of hernia mesh pathology evaluation. Fadaee N, Mazer L, Sharma R, et al.

Correction

- 817** Correction

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