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A9 **Message from the Editor: Gratitude for 2019**

Original Scientific Articles

523 **Outcomes of Resectability Assessment of the Dutch Colorectal Cancer Group Liver Metastases Expert Panel**

Joost Huiskens, MD, Karen Bolhuis, MD, Marc RW Engelbrecht, MD, PhD, Koert P De Jong, MD, PhD, Geert Kazemier, MD, PhD, Mike SL Liem, MD, PhD, Cornelis Verhoef, MD, PhD, Johannes HW de Wilt, MD, PhD, Cornelis JA Punt, MD, PhD, Thomas M van Gulik, MD, PhD, for the Dutch Colorectal Cancer Group

Uniform criteria for resectability in patients with colorectal cancer liver metastases are lacking. This study reports on the feasibility and short-term outcomes of the Dutch Colorectal Cancer Group Liver Metastases Expert Panel.

533 **Randomized Trial of Perioperative Probiotics Among Patients Undergoing Major Abdominal Operation**

CME

Jan Franko, MD, PhD, FACS, Shankar Raman, MD, FACS, Nivedita Krishnan, MD, Daniela Frankova, MD, PhD, May C Tee, MD, MPH, Rushin Brahmabhatt, MD, Charles D Goldman, MD, FACS, Ronald J Weigel, MD, PhD, MBA, FACS

Earlier studies identified fewer infectious complications with use of perioperative probiotics. Short-course perioperative use of VSL #3 probiotics in this randomized trial did not result in change of mortality or infection rate, but was associated with a higher readmission rate, chiefly due to dehydration.

541 **Electrospun P(LLA-CL) Nanoscale Fibrinogen Patch vs Porcine Small Intestine Submucosa Graft Repair of Inguinal Hernia in Adults: A Randomized, Single-Blind, Controlled, Multicenter, Noninferiority Trial**

Shaojie Li, MD, Hongbing Xiao, MD, Li Yang, MD, Lei Hua, MD, Zhiying Qiu, MD, Xingchen Hu, MS, Ding Ping, MD, Kan Zheng, MD, Hongbing He, MD, Jiangxiong Tang, MD

Results of this randomized, single-blind, controlled multicenter trial show that novel electrospun P(LLA-CL) nanoscale fibrinogen patch was not inferior to conventional porcine small intestine submucosa patch for hernia repair, and has potential to become a cost-effective alternative for hernia treatment in China.

552 Utility of a Three-Dimensional Printed Pelvic Model for Lateral Pelvic Lymph Node Dissection Education: A Randomized Controlled Trial

Daisuke Hojo, MD, Koji Murono, MD, PhD, Hiroaki Nozawa, MD, PhD,
Kazushige Kawai, MD, PhD, Keisuke Hata, MD, PhD, Toshiaki Tanaka, MD, PhD,
Koji Oba, PhD, Soichiro Ishihara, MD, PhD

A total of 102 participants were educated by using a 3-dimensional pelvic model or a textbook. Education using a pelvic model is superior to that using a textbook when learning pelvic anatomy required for lateral pelvic lymph node dissection.

560 Intraoperative Tumor Assessment Using Real-Time Molecular Imaging in Head and Neck Cancer Patients

Stan van Keulen, MD, Naoki Nishio, MD, PhD, Shayan Fakurnejad, BSc, Nynke S van den Berg, PhD, Guolan Lu, PhD, Andrew Birkeland, MD, Brock A Martin, MD,
Tymour Forouzanfar, MD, PhD, A Dimitrios Colevas, MD, Eben L Rosenthal, MD, FACS

This study assesses the clinical value of real-time intraoperative fluorescence imaging during head and neck cancer surgery. Tumor tissue could be visualized in situ with high consistency, making open-field fluorescence imaging a valuable tool with predictive capabilities for complex head and neck surgery.

568 Impact of Pre-Transplant Malignancy on Outcomes After Kidney Transplantation: United Network for Organ Sharing Database Analysis

Devon Livingston-Rosanoff, MD, PhD, David P Foley, MD, FACS, Glen Levenson, PhD,
Lee G Wilke, MD, FACS

Outcomes after kidney transplantation in patients with pre-transplant malignancy (pre-TM) were analyzed within the United Network for Organ Sharing database. The rate of pre-TM patients receiving kidney transplants has increased since 1994. Transplant recipients with pre-TM have increased risk of post-transplant malignancy, graft failure, and decreased overall survival.

580 Choice of Reference Creatinine for Post-Traumatic Acute Kidney Injury Diagnosis**CME**

Gabrielle E Hatton, MD, Reginald E Du, BS, Claudia Pedroza, PhD, Shuyan Wei, MD,
John A Harvin, MD, MS, FACS, Kevin W Finkel, MD, FACP, FASN, FCCM, Charles E Wade, PhD,
Lillian S Kao, MD, MS, FACS

True reference creatinine is frequently unknown in patients presenting with traumatic injury, making acute kidney injury diagnosis difficult. Choice of reference estimate determines the clinical relevance of an acute kidney injury diagnosis. Of 4 reference estimates evaluated in this study, only the Modified Diet of Renal Diseases resulted in acute kidney injury diagnoses that were both prognostic and incremental.

- 589** **Safety and Feasibility of Per-Oral Pyloromyotomy as Augmentative Therapy after Prior Gastric Electrical Stimulation for Gastroparesis**
CME Andrew T Strong, MD, John Rodriguez, MD, FACS, Matthew Kroh, MD, FACS, FASGE, FASMBS, Jeffrey Ponsky, MD, FACS, Michael Cline, DO, Kevin El-Hayek, MD, FACS
- For patients with diabetic or idiopathic gastroparesis who have previously undergone implantation of gastric electrical stimulators, per-oral pyloromyotomy may serve to augment symptom control.
- 596** **Imaging or Fiber Probe-Based Approach? Assessing Different Methods to Detect Near Infrared Autofluorescence for Intraoperative Parathyroid Identification**
Giju Thomas, PhD, Malcolm H Squires, MD, Tyler Metcalf, BS, Anita Mahadevan-Jansen, PhD, John E Phay, MD, FACS
- Near infrared autofluorescence can guide intraoperative parathyroid gland identification. Devices that can detect near infrared autofluorescence typically rely on imaging or fiber probe-based approaches. This prospective study compared both of these approaches for the first time, when tested concurrently in a preliminary cohort of 20 patients.
- 609** **National Evaluation of Needlestick Events and Reporting Among Surgical Residents**
Anthony D Yang, MD, MS, FACS, Christopher M Quinn, MS, D Brock Hewitt, MD, MPH, MS, Jeanette W Chung, PhD, Teresa R Zembower, MD, MPH, Andrew Jones, PhD, Jo Buyske, MD, FACS, David B Hoyt, MD, FACS, Thomas J Nasca, MD, MACP, Karl Y Bilimoria, MD, MS, FACS
- In a national survey of 7,391 surgery residents from all 260 ACGME-accredited training programs, 27.7% described experiencing a needlestick within the last 6 months; 28.7% did not report the needlestick. This detailed national survey offers guidance in identifying opportunities to reduce needlestick injuries and encourage reporting among trainees.
- 621** **Safety in Allowing Residents to Independently Perform Appendectomy: A Retrospective Review**
James R Barrett, MD, Melissa K Drezdzon, MD, Arezu H Monawer, MD, Ann P O'Rourke, MD, MPH, FACS, John E Scarborough, MD, FACS
- A retrospective single-institution comparison of 331 teaching resident cases and 597 nonteaching resident cases in the US demonstrated no significant difference in conversion to open, surgical site infection, postoperative CT scan, or 30-day readmission, but slightly longer operative time was observed when controlling for patient- and procedure-related factors.
- 626** **Best Practices in Data Use for Achieving Successful Implementation of Enhanced Recovery Pathway**
Q Lina Hu, MD, MS, Jessica Y Liu, MD, MS, Deborah B Hobson, MSN, Mark E Cohen, PhD, Bruce L Hall, MD, PhD, MBA, FACS, Elizabeth C Wick, MD, FACS, Clifford Y Ko, MD, MS, MSHS, FACS
- The most important data use practice associated with successful enhanced recovery pathway implementation was data feedback to frontline providers of both process and outcomes measures. However, this was rarely performed in a national cohort of hospitals and represents a substantial but straightforward opportunity for improvement.

Letters

- 633** Fifteen Years of Research on Surgical Case Duration Prediction by Combining Preoperatively Available Service and Surgeon Data
Franklin Dexter, MD, PhD, FASA, Richard H Epstein, MD, FASA
- 634** Accurately Predicting Case-Time Duration: In reply to Dexter and Epstein
Matthew A Bartek, MD, MPH, Rajeev C Saxena, MD, MBA, Stuart Solomon, MD, Christine T Fong, MS, John D Lang, MD, Bala G Nair, PhD, Lakshmana D Behara, MS, Ravitheja Venigandla, MS, Kalyani Velagapudi, PhD
- 635** Clarifying the Role of Targeted Muscle Reinnervation in Amputation Management
William C Lineaweaver, MD, FACS, Feng Zhang, MD, PhD

Continuing Medical Education

Safety and Feasibility of Per-Oral Pyloromyotomy as Augmentative Therapy after Prior Gastric Electrical Stimulation for Gastroparesis. Strong AT, Rodriguez J, Kroh M, et al.

Choice of Reference Creatinine for Post-Traumatic Acute Kidney Injury Diagnosis. Hatton GE, Du RE, Pedroza C, et al.

Randomized Trial of Perioperative Probiotics Among Patients Undergoing Major Abdominal Operation. Franko J, Raman S, Krishnan N, et al.

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