

CONTENTS

FEATURED ARTICLE

- Statistical Power and Sample Size Calculations: A Primer for Pediatric Surgeons 1173
Steven J. Staffa and David Zurakowski

REVIEW ARTICLES

- Early Enteral Feeding after Pediatric Abdominal Surgery: A Systematic Review of the Literature 1180
Douglas Greer, Yasiru G. Karunaratne, Jonathan Karpelowsky, and Susan Adams
- EXIT (Ex Utero Intrapartum Treatment) Surgery for the Management of Fetal Airway Obstruction: A Systematic Review of the Literature 1188
Rommy H. Novoa, Willy Quintana, Walter Castillo-Urquiaga, and Walter Ventura
- Tube Cecostomy Versus Appendicostomy for Antegrade Enemas in the Management of Fecal Incontinence in Children: A Systematic Review 1196
Hisham Mohamed, Carolyn Wayne, Arielle Weir, Emily A Partridge, Jacob C. Langer, and Ahmed Nasr
- Cryptorchidism, Gonocyte Development, and the Risks of Germ Cell Malignancy and Infertility: A Systematic Review 1201
Moshe Loebenstein, Jorgen Thorup, Dina Cortes, Erik Clasen-Linde, John M. Hutson, and Ruili Li

TRAUMA

- Therapeutic Laparoscopy for Pediatric Abdominal Trauma 1211
Parker T. Evans, Hannah M. Phelps, Shilin Zhao, Kyle J. Van Arendonk, Amber L. Greeno, Kelly F. Collins, and Harold N. Lovvorn III
- The Benefits of Limiting Scheduled Blood Draws in Children with a Blunt Liver or Spleen Injury 1219
Shannon N. Acker, Lauren R.S. Hill, Denis D. Bensard, Steven Moulton, and David A. Partrick
- Pediatric Sternal Fractures: A Single Center Retrospective Review 1224
Alexander V. Chalpin and David P. Mooney
- Hospitalizations for Pediatric Dog Bite Injuries in the United States 1228
Robert J. McLoughlin, Lauren Cournoyer, Michael P. Hirsh, Muriel A. Cleary, and Jeremy T. Aidlen
- Circumstances Surrounding Gun Violence with Youths in an Urban Setting 1234
Breanna A. Borg, Carolyn B. Krouse, Jennifer S. McLeod, Christina M. Shanti, and Lydia Donoghue
- Ability of the PILOT Score to Predict 6-Month Functional Outcome in Pediatric Patients with Moderate–severe Traumatic Brain Injury 1238
Brian F. Flaherty, Margaret L. Jackson, Charles S. Cox Jr, Amy Clark, Linda Ewing-Cobbs, Richard Holubkov, Kevin R. Moore, Rajan P. Patel, and Heather T. Keenan
- Validation of the PRESTO Score in Injured Children in a South-African Quaternary Trauma Center 1245
Etienne St-Louis, Rubesh Hassamal, Tarek Razek, Robert Baird, Dan Poenaru, and Timothy C. Hardcastle
- Parenteral Nutrition Prolongs Hospital Stay in Children with Nonoperative Blunt Pancreatic Injury: A Propensity Score Weighted Analysis 1249
Cory McLaughlin, Caron Park, Christianne J. Lane, Wendy J. Mack, David Bliss, Jeffrey S. Upperman, and Aaron R. Jensen
- Validation of the “CHIIDA” and Application for PICU Triage in Children with Complicated Mild Traumatic Brain Injury 1255
Katie E. Neumayer, Jill Sweney, Stephen J. Fenton, Heather T. Keenan, and Brian F. Flaherty

ENDOCRINE CONDITIONS

Children are at a High Risk of Hypocalcaemia and Hypoparathyroidism after Total Thyroidectomy <i>Mechteld de Jong, Hassan Nounou, Virginia Rozalén García, Ioannis Christakis, Caroline Brain, Tarek E. Abdel-Aziz, Richard J. Hewitt, and Tom R. Kurzawinski</i>	1260
4-Hour Postoperative PTH Level Predicts Hypocalcemia after Thyroidectomy in Children <i>R. Elliott Overman Jr, Lily B Hsieh, Ram Menon, Inas H. Thomas, and Steven W. Bruch</i>	1265

NEONATAL CONDITIONS

Multicenter Retrospective Comparison of Spontaneous Intestinal Perforation Outcomes Between Primary Peritoneal Drain and Primary Laparotomy <i>Samantha Ahle, Faidah Badru, Rachelle Damle, Hector Osei, Armando Salim Munoz-Abraham, Adam Bajinting, Maria Estefania Barbisan, Amina M. Bhatia, Cindy Gingalewski, Jose Greenspon, Nicholas Hamilton, David Stitelman, Marya Strand, Brad W. Warner, and Gustavo A. Villalona</i>	1270
Biobanking for Necrotizing Enterocolitis: Needs and Standards <i>Hala Chaaban, Troy A. Markel, Jennifer Canvasser, and Misty Good</i>	1276
Immediate Versus Silo Closure for Gastroschisis: Results of a Large Multicenter Study <i>Russell B. Hawkins, Steven L. Raymond, Shawn D. St. Peter, Cynthia D. Downard, Faisal G. Qureshi, Elizabeth Renaud, Paul D. Danielson, and Saleem Islam</i>	1280
Spinal Cord Anomalies in Children with Anorectal Malformations: Ultrasound is a Good Screening Test <i>Susan Jehangir, Susan Adams, Tracey Ong, Camille Wu, Robert Goetti, Adam Fowler, and Soundappan Sannappa Venkatraman</i>	1286
Retinal Findings in Neonates with Congenital Diaphragmatic Hernia and Extracorporeal Membrane Oxygenation <i>Petra P. Larsen, Florian Kipfmüller, Frank G. Holz, Heiko Reutter, Andreas Müller, and Tim U. Krohne</i>	1292
Abdominal Compartment Syndrome Monitoring in Neonates with an Acute Abdomen – A Pilot, Retrospective, Observational Study <i>Amy Hort, Himanshu Popat, Robert Halliday, Claire Galea, and Soundappan Soundappan</i>	1296

AIRWAY/THORACIC CONDITIONS

Great Vessel Anomalies and Their Impact on the Surgical Treatment of Tracheobronchomalacia <i>Wendy Jo Svetanoff, Benjamin Zendejas, Charles J. Smithers, Sanjay P. Prabhu, Christopher W. Baird, Russell W. Jennings, and Thomas E. Hamilton</i>	1302
The Risks of Postoperative Complications and Prolonged Hospital Stay in Children Receiving Bronchoscopy <i>Peng Li, Genqin Jiang, and Qi Li</i>	1309
Development of a Multi-Institutional Registry for Children with Operative Congenital Lung Malformations <i>Shaun M. Kunisaki, Jacqueline M. Saito, Mary E. Fallat, Shawn D. St. Peter, Dave R. Lal, Kevin N. Johnson, Rodrigo A. Mon, Cheryl Adams, Bola Aladegbami, Christina Bence, R. Cartland Burns, Kristine S. Corkum, Katherine J. Deans, Cynthia D. Downard, Jason D. Fraser, Samir K. Gadepalli, Michael A. Helmrath, Rashmi Kabre, Matthew P. Landman, Charles M. Leys, Allison F. Linden, Joseph J. Lopez, Grace Z. Mak, Peter C. Minneci, Brooks L. Rademacher, Aimen Shaaban, Sarah K. Walker, Tiffany N. Wright, Ronald B. Hirschl, and on behalf of the Midwest Pediatric Surgery Consortium</i>	1313

PRACTICE MANAGEMENT/RESIDENT MATCHING

Provider Education Decreases Opioid Prescribing after Pediatric Umbilical Hernia Repair <i>Kaitlin N. Piper, Katherine J. Baxter, Martha Wetzel, Courtney McCracken, Curtis Travers, Bethany Slater, Sarah B. Cairo, David H. Rothstein, Robert Cina, Melvin Dassinger, Patrick Bonasso, Aaron Lipskar, Naomi-Liza Denning, Eunice Huang, Sohail R. Shah, Megan E. Cunningham, Raquel Gonzalez, Jeremy D. Kauffman, Kurt F. Heiss, Mehul V. Raval, and on behalf of the Pediatric Surgical Research Collaborative - PedSRC</i>	1319
---	------

(Continued)

Variation in Surgical Management of Asymptomatic Umbilical Hernia at Freestanding Children's Hospitals <i>Jonathan L. Hills-Dunlap, Patrice Melvin, Dionne A. Graham, Seema P. Anandalwar, Mark A. Kashtan, and Shawn J. Rangel</i>	1324
--	------

Filling the Gap: Objective Data to Guide Pediatric Surgery Applicants Who do not Match on the First Attempt <i>S. Christopher Derderian, Michael J. Benge, Frederick M. Karrer, Shannon N. Acker, and Jonathan P. Roach</i>	1330
--	------

VASCULAR ACCESS

A Decision Tree to Guide Long Term Venous Access Placement in Children and Adolescents Undergoing Surgery for Renal Tumors <i>Amanda F. Saltzman, Alonso Carrasco Jr, Sarah Hecht, Jonathan Walker, Brian T. Caldwell, Jennifer L. Bruny, and Nicholas G. Cost</i>	1334
---	------

Perioperative Neutropenia is not an Independent Risk Factor for Infectious Complications of Central Venous Line Placement in Children: A Propensity Score-Matched Analysis <i>Aaron J. Cunningham, Kristen V. McClellan, Elizabeth Dewey, Sanjay Krishnaswami, Marilyn W. Butler, Dawn Nolt, Elizabeth Fialkowski, Meredith C. Haag, and Nicholas A. Hamilton</i>	1339
--	------

The Effect of Absolute Neutrophil Count (ANC) on Early Surgical Site Infection in Implanted Central Venous Catheter (ICVC) <i>Joong Kee Youn, Kyuwhan Jung, Taejin Park, Hyun-Young Kim, and Sung-Eun Jung</i>	1344
---	------

OTHER CONDITIONS

Initial Reduction of Flexible Pectus Carinatum with Outpatient Manipulation as an Adjunct to External Compressive Bracing: Technique and Early Outcomes at 12 Weeks <i>Stephanie Fraser, Tom Richards, Leanne Harling, Akshay J. Patel, and Ian Hunt</i>	1347
---	------

Diagnosis and Treatment of Pleuropulmonary Blastoma in Children: A Single-Center Report of 41 Cases <i>Na Zhang, Qi Zeng, Xiaoli Ma, Chenghao Chen, Jie Yu, Xu Zhang, Dong Yan, Changqi Xu, Dingyi Liu, and Qian Zhang</i>	1351
---	------

Insufflation in Minimally Invasive Surgery: Is There Any Advantage in Staying Low? <i>Martin Sidler, Zeng Hao Wong, Simon Eaton, Nargis Ahmad, Meydene Ong, Ahmed Morsi, Clare M. Rees, Stefano Giuliani, Simon Blackburn, Joseph I. Curry, Kate M. Cross, and Paolo De Coppi</i>	1356
--	------

Resource Overutilization in the Diagnosis of Lymphedema Praecox <i>Adil A. Shah, Mikael Petrosyan, Wasay Nizam, Jeffrey Roberson, and Philip Guzzetta</i>	1363
--	------

Microbial Alteration of Small Bowel Stoma Effluents and Colonic Feces in Infants with Short Bowel Syndrome <i>Tian Zhang, Ying Wang, Weihui Yan, Lina Lu, Yijing Tao, Jie Jia, and Wei Cai</i>	1366
---	------

What Predicts Spontaneous Passage of ≤ 1 Cm Ureteral Stones in Children? <i>A. Midhat Elmaci, M. İrfan Dönmez, Fatih Akin, Bilal Çetin, and Metin Gündüz</i>	1373
--	------

Preventing the O in OHVIRA (Obstructed Hemivagina Ipsiilateral Renal Agenesis): Early Diagnosis and Management of Asymptomatic Herlyn–Werner–Wunderlich Syndrome <i>Yu Guang Tan, Narasimhan K. Laksni, Te-Lu Yap, Nadarajah Sadhana, and Caroline C. P. Ong</i>	1377
---	------

Use of Cryoanalgesia for Pain Management for the Modified Ravitch Procedure in Children <i>Mercedes Pilkington, Calista M. Harbaugh, Ronald B. Hirsch, James D. Geiger, and Samir K. Gadepalli</i>	1381
---	------

Ileal Exclusion for Pruritus Treatment in Children with Progressive Familial Intrahepatic Cholestasis and Other Cholestatic Diseases <i>Victor Van Vaisberg, Ana Cristina Aoun Tannuri, Fabiana Roberto Lima, and Uenis Tannuri</i>	1385
--	------

Hemodialysis and Peritoneal Dialysis Access Related Outcomes in the Pediatric and Adolescent Population <i>Isibor J. Arhuidese, Jite Wanogho, Muhammad Faateh, Eunice A. Aji, Drew A. Rideout, and Mahmoud B. Malas</i>	1392
--	------

GLOBAL SURGERY

- Long Term Bowel Function after Repair of Anorectal Malformations in Uganda 1400
Felix Oyanya, Alfred Ogwal, Stella Nimanya, Arlene Muzira, Nasser Kakembo, Phyllis Kisa, and John Sekabira

OPERATIVE TECHNIQUE

- A Multidisciplinary Approach to VA ECMO Cannulation in Children 1405
Emile I. Gleeson, Megan E. Cunningham, Cole Burgman, Matthew A. Musick, James A. Thomas, Gregory C. Gardner, Kamlesh U. Kukreja, and Adam M. Vogel

- Dual-Layer Everted Saphenous Vein Patch for Pediatric Femoral Artery Repair Following ECMO Decannulation 1409
Rebecca Sorber, Felipe E. Pedroso, Jennifer M. Murphy, and Dylan Stewart

HISTORICAL VIGNETTE

- The History of Surgery for Esophageal Atresia 1414
Don K. Nakayama

CORRESPONDENCE

LETTER TO THE EDITOR

- Long-Term Follow-Up of Pediatric Open and Laparoscopic Inguinal Hernia Repair 1420
Jahoorahmad Z. Patankar

REPLY TO LETTER TO THE EDITOR

- Reply to Letter to the Editor 1421
Albert J Chong, Lisa Herrinton, and Helene Fevrier

LETTER TO THE EDITOR

- Thoracic Versus Abdominal Approach to Correct Diaphragmatic Eventration in Children 1422
Jayakumar TK, KirtiKumar J. Rathod, and Manish Pathak

ANNOUNCEMENTS OF FUTURE MEETINGS

- Announcements of Future Meetings 1424