

**CONTENTS**

**FEATURED ARTICLE**

- Risk Factors for the Development of Medical Stress Syndrome Following Surgical Intervention 1685  
*Amichai Ben-Ari, Fortu Benarroch, Yaron Sela, and Daniella Margalit*

**PRACTICE MANAGEMENT**

- Am I Out of Control? The Application of Statistical Process Control Charts to Children's Surgery 1691  
*Bruce Jaffray*
- Strategies in Adjusting for Multiple Comparisons: A Primer for Pediatric Surgeons 1699  
*Steven J. Staffa and David Zurakowski*

**ONCOLOGY**

- Precision Oncology: A Primer for Pediatric Surgeons from the APSA Cancer Committee 1706  
*Courtney J. Harris, Alicia M. Waters, Elisabeth T. Tracy, Emily Christison-Lagay, Reto M. Baertshiger, Peter Ehrlich, Shahab Abdessalam, Jennifer H. Aldrink, Daniel S. Rhee, Roshni Dasgupta, David A. Rodeberg, and Timothy B. Lautz*
- What's New in Pediatric Melanoma: An Update from the APSA Cancer Committee 1714  
*Jennifer H. Aldrink, Stephanie Polites, Timothy B. Lautz, Marcus M. Malek, Daniel Rhee, Jennifer Bruny, Emily R. Christison-Lagay, Elisabeth T. Tracy, Shahab Abdessalam, Peter F. Ehrlich, Roshni Dasgupta, and Mary T. Austin*
- Pancreatectomies for Pediatric Pancreatic Tumors: A Single Institute Experience from 2007 to 2018 1722  
*Haiyan Cheng, Shen Yang, Qinghua Ren, Wei Yang, Wei Han, Xiaofeng Chang, Zhiyun Zhu, Hong Qin, and Huanmin Wang*
- Management of Pancreatic Pseudocysts in Pediatric Oncology Patients 1727  
*Yousef El-Gohary, Sara Mansfield, Jessica Staszak, Abdelhafeez Abdelhafeez, Lindsay Talbot, Ching-Hon Pui, Robert Gold, Andrew J. Murphy, and Andrew M. Davidoff*
- Diagnostic Accuracy of Serum Alpha-Fetoprotein Levels in Diagnosing Recurrent Sacrococcygeal Teratoma: A Systematic Review 1732  
*L.J. van Heurn, M.M. Knipscheer, J.P.M. Derikx, and L.W.E. van Heurn*
- The Impact of Local Control in the Treatment of Children with Advanced Infantile and Adult-Type Fibrosarcoma: Experience of the Cooperative Weichteilsarkom Studiengruppe (CWS) 1740  
*Monika Sparber-Sauer, Christian Vokuhl, Guido Seitz, Sabine Stegmaier, Erika Hallmen, Thekla von Kalle, Monika Scheer, Marc Münter, Stefan S. Bielack, Ruth Ladenstein, Felix Niggli, Gustaf Ljungman, Joerg Fuchs, Thomas Klingebiel, Ewa Koscielniak, and on behalf of the CWS Study Group*

**TRAUMA**

- The Adherence of Adult Trauma Centers to American Pediatric Surgical Association Guidelines on Management of Blunt Splenic Injuries 1748  
*Radu Filipescu, Colin Powers, Han Yu, David H. Rothstein, Carroll M. Harmon, Brian Clemency, Weidun A. Guo, and Kathryn D. Bass*
- The Financial Burden of Musculoskeletal Firearm Injuries in Children with and without Concomitant Intra-Cavitary Injuries 1754  
*Parker T. Evans, Jacquelyn S. Pennings, Richard Samade, Harold N. Lovvorn III, and Jeffrey E. Martus*

Predictive Value of the Shock Index (SI) Compared to the Age-Adjusted Pediatric Shock Index (SIPA) for Identifying Children That Needed the Highest-Level Trauma Activation Based on the Presence of Consensus Criteria	1761
<i>Geet Gandhi, Mary Kate Claiborne, Toni Gross, Bethany L Sussman, Katherine Davenport, Daniel Ostlie, and Blake Bulloch</i>	
Utilization of CT Imaging in Minor Pediatric Head, Thoracic, and Abdominal Trauma in the United States	1766
<i>Lauren Strait, Rebecca Sussman, Ashar Ata, and Mary J. Edwards</i>	
Traumatic Epidural Hematomas in the Pediatric Population: Clinical Characteristics and Diagnostic Pitfalls	1773
<i>Camilla Cremonini, Meghan Lewis, Monica Darlene Wong, Elizabeth R. Benjamin, Kenji Inaba, and Demetrios Demetriades</i>	

### GASTROINTESTINAL CONDITIONS

Postfundoplication Retching: Strategies for Management	1779
<i>Catherine A. Richards</i>	
Short-Term Parent Reported Recovery Following Open and Laparoscopic Fundoplication	1796
<i>Thomas J. Fyhn, Charlotte K. Knatten, Bjørn Edwin, Ole Schistad, Ragnhild Emblem, and Kristin Bjørnland</i>	
STEP Improves Long-Term Survival for Pediatric Short Bowel Syndrome Patients: A Markov Decision Analysis	1802
<i>Rashikh A. Choudhury, Dor Yoeli, Gerard Hoeltzel, Hunter B. Moore, Kas Prins, Mark Kovler, Seth D. Goldstein, Stephan G. Holland-Cunz, Megan Adams, Jonathan Roach, Trevor L. Nydam, Raphael N. Vuille-dit-Bille</i>	
Congenital Short Bowel Syndrome: Systematic Review of a Rare Condition	1809
<i>Elisa Negri, Riccardo Coletta, and Antonino Morabito</i>	

### COLORECTAL CONDITIONS

Progression to Colectomy in the Era of Biologics: A Single Center Experience with Pediatric Ulcerative Colitis	1815
<i>Faith D. Ihekweazu, Tatiana Fofanova, Ryan Palacios, Avanthi Ajjarapu, Lina Karam, Adam M. Vogel, J R Rodriguez, and Richard Kellermayer</i>	
Long-Term Outcomes of Laparoscope-Assisted Heart-Shaped Anastomosis for Children with Hirschsprung Disease: A 10-Year Review Study	1824
<i>Didi Zhuansun, Chunlei Jiao, Xinyao Meng, Jun Xiao, and Jiexiong Feng</i>	
Histopathological Perspective of the Pulled-Through Colon in Hirschsprung Disease: Impact on Clinical Outcome	1829
<i>Somaia Ahmed Saad, Maha Mohamed Gusim Elseed, Amr Abdelhamid AbouZeid, Eman AbdelSalam Ibrahim, Ahmed Bassiouny Radwan, Sameh Abdel Hay, and Mosad Mohamed El-Behery</i>	
Clinical Urologic and Urodynamic Outcomes in Patients with Anorectal Malformation and Absent Vagina after Vaginal Replacement	1834
<i>Haris Ahmed, Mosab Almomani, Andrew C. Strine, Pramod P. Reddy, Curtis Sheldon, Jason Frischer, Lesley Breech, Eugene Minevich, Paul H. Noh, and Brian A. VanderBrink</i>	
Testicular Function and Sexuality in Adult Patients with Anorectal Malformation	1839
<i>Emanuele Trovalusci, Marco Rossato, Piergiorgio Gamba, and Paola Midrio</i>	

### THORACIC CONDITIONS

Quantifying Postoperative Sleep Loss Associated with Increased Pain in Children Undergoing a Modified Nuss Operation	1846
<i>Benjamin T. Many, Yazan K. Rizeq, Soyang Kwon, Jonathan C. Vacek, Seth D. Goldstein, Catherine J. Hunter, Hassan Ghomrawi, and Fizan Abdullah</i>	

Open Versus Thoracoscopic Thymectomy for Juvenile Myasthenia Gravis <i>S. Christopher Derderian, D. Dean Potter, Samiksha Bansal, Phillip G. Rowse, and David A. Partrick</i>	1850
Thoracoscopic Versus Conventional Open Repair of Tracheoesophageal Fistula in Neonates: A Short-Term Comparative Study <i>Ahmed Ezzat Rozeik, Mohamed Magdy Elbarbary, Amin Mohamed Saleh, Ahmed Refaat Khodary, and Mohammad Ahmad Al-Ekrashy</i>	1854
Delayed Diagnosis and Surgical Treatment of Bronchial Foreign Body in Children <i>Yuhao Wu, Jiangtao Dai, Gang Wang, Yonggang Li, Hongbo Li, Chun Wu, and Guanghui Wei</i>	1860

### NEONATAL CONDITIONS

Outcomes in the Giant Omphalocele Population: A Single Center Comprehensive Experience <i>Heather R. Nolan, Monica L. Wagner, Todd Jenkins, and Foong-Yen Lim</i>	1866
Prostaglandin E1 in Infants with Congenital Diaphragmatic Hernia (CDH) and Life-Threatening Pulmonary Hypertension <i>Kévin Le Duc, Sébastien Mur, Dyuti Sharma, Estelle Aubry, Morgan Recher, Thameur Rakza, Laurent Storme and Center for Rare Disease «Congenital Diaphragmatic Hernia»</i>	1872
Discordant Prenatal Ultrasound and Fetal MRI in CDH: Wherein Lies the Truth? <i>Aimee G. Kim, Gabriella Norwitz, Monita Karmakar, Maria Ladino-Torres, Deborah R. Berman, Jeannie Kreuzman, Marjorie C. Treadwell, George B. Mychaliska, and Erin E. Perrone</i>	1879

### HEPATOBIILIARY CONDITIONS

Management of Focal Nodular Hyperplasia of the Liver: Experience of 50 Pediatric Patients in a Tertiary Center <i>Angelo Zarfati, Greg Chambers, Luca Pio, Florent Guerin, Virginie Fouquet, Stéphanie Franchi-Abella, and Sophie Branchereau</i>	1885
Determining the Optimal Timing of Liver Transplant for Pediatric Patients after Kasai Portoenterostomy Based on Disease Severity Scores <i>Patrick H.Y. Chung, Kenneth S.H. Chok, Kenneth K.Y. Wong, Paul K.H. Tam, and Chung Mau Lo</i>	1892
Radiological and Surgical Differences Between Congenital End-to-Side (Abernethy Malformation) and Side-to-Side Portocaval Shunts <i>Javier Bueno, Mercedes Pérez, Santiago Lopez-Ben, Gabriela Guillén, José A Molino, Sergio López, Carla Venturi, Iratxe Diez, and Manuel López</i>	1897
Hepatopulmonary Fusion: A Rare Variant of Congenital Diaphragmatic Hernia <i>Dalya M. Ferguson and for the Congenital Diaphragmatic Hernia Study Group</i>	1903

### OTHER CONDITIONS

Inguinal Hernia in Girls: A Retrospective Analysis of Over 1000 Patients <i>Kelly MA Dreuning, Rinse W Barendsen, AS Paul van Trotsenburg, Jos WR Twisk, Christien Sleeboom, LW Ernest van Heurn, and Joep PM Derikx</i>	1908
A Standardized Technique of Laparoscopic Placement of Peritoneal Dialysis Catheter with Omentectomy and Closure of Patent Processus Vaginalis: A 3-in-1 Minimally Invasive Surgical Approach in Children <i>Yuenshan Sammi Wong, Kristine Kit Yi Pang, Alison Lap Tak Ma, Pak Chiu Tong, and Yuk Him Tam</i>	1914
Predicting the Optimal Depth of Ultrasound-Guided Right Internal Jugular Vein Central Venous Catheters in Neonates <i>Fernando Montes-Tapia, Karla Hernández-Trejo, Fernando García-Rodríguez, Julio Jaime-Reyes, Consuelo Treviño-Garza, Barbara Cárdenas-del Castillo, Isaiás Rodríguez- Balderrama, and Manuel de la O-Cavazos</i>	1920
Role of Ultrasound in the Follow-Up of Intra-Abdominal Testes Post Fowler-Stephens Orchiopexy <i>Wael M. Elzeneini, Shaimaa E. Eldiasty, Haytham M. Nasser, and Ahmed M. Elzeneini</i>	1925

(Continued)

Abdominal Pain in Teenagers: Beware of Testicular Torsion 1933  
*Sofia Vasconcelos-Castro, and Miguel Soares-Oliveira*

Early Pyeloplasty Versus Conservative Management of Severe Ureteropelvic Junction Obstruction in Asymptomatic Infants 1936  
*Ahmad Khaleghnejad Tabari, Khashayar Atqiaee, Leily Mohajerzadeh, Mohsen Rouzrokh, Javad Ghoroubi, Alireza Alam, Saran Lotfollahzadeh, Ali Tabatabaey, and Behnaz Bakaeian*

### **SURGICAL RESEARCH**

In Utero Treatment of Myelomeningocele with Placental Mesenchymal Stromal Cells — Selection of an Optimal Cell Line in Preparation for Clinical Trials 1941  
*Laura A. Galganski, Priyadarsini Kumar, Melissa A. Vanover, Christopher D. Pivetti, Jamie E. Anderson, Lee Lankford, Zachary J. Paxton, Karen Chung, Chelsey Lee, Mennatalla S. Hegazi, Kaeli J. Yamashiro, Aijun Wang, and Diana L. Farmer*

Does the Apoptosis Pathway Play a Critical Role in Gonocyte Transformation? 1947  
*Melissa Yixin Tien, Sanduni Amaya Abeydeera, Hyun-Jung Cho, Gulcan Sarila, Angelique Catubig, Emily Burton, John Hutson, and Ruili Li*

Interplay Between Collagenase and Undescended Testes in Adamts16 Knockout Rats 1952  
*Gulcan Sarila, Tuya Bao, Sanduni Amaya Abeydeera, Ruili Li, Blair Mell, Bina Joe, Angelique Catubig, and John Hutson*

### **GLOBAL SURGERY PAPERS**

Establishment of an Antimicrobial Stewardship Strategy on the Surgical NICU at Cairo University Specialized Pediatric Hospital 1959  
*Dina M. Bassiouny, Reem M. Hassan, Aly Shalaby, Mona M.A. Halim, and Mona A. Wassef*

Changing Trends in the Referral and Timing of Treatment for Congenital Cryptorchidism: A Single-Center Experience from Bosnia and Herzegovina 1965  
*Zlatan Zvizdic, Belma Islamovic, Emir Milisic, Asmir Jonuzi, and Semir Vranic*

### **OPERATIVE TECHNIQUE**

Minimal Dissection of Posterior Wall of Rectum Reduces Rectal Prolapse in Laparoscopic Assisted Anorectal Pull-Through 1969  
*Joonhyuk Son, Wontae Kim, Soo-Min Jung, Sanghoon Lee, and Jeong-Meen Seo*

Recurrent Rectourethral Fistula Repair: A Novel Technique of Gracilis Muscle Interposition 1974  
*Vasily V. Nikolaev*

### **CORRESPONDENCE**

#### **LETTER TO EDITOR**

Variability in the Transition Zone Length in Hirschsprung Disease 1979  
*Karla A. Santos-Jasso*

#### **REPLY TO LETTER TO EDITOR**

Variability in the Transition Zone Length in Hirschsprung Disease 1980  
*Hemanshu S. Thakkar, Simon Blackburn, Joe Curry, Paolo De Coppi, Stefano Giuliani, Neil Sebire, and Kate Cross*

### UNPUBLISHED ARTICLES

- Association of Hirschsprung's Disease with Anorectal Malformations: The Early Alarming Signs for  
Diagnosis and Comorbidity Related to this Association 1981  
*Almoutaz A. Eltayeb and Abeer refaiy*
- Letter to the Editor 1984  
*Wajid Bin Jawaid, Sarah L. Almond, Nicholas Lansdale, Basem Khalil, and Antonino Morabito*
- Small Left Colon Syndrome in 3 Sisters e1  
*Sophie Maurin, Kh. Hussein, J. Gaudin, and G. Levard*
- Novel Approach to Vaginal Calculus in a Girl with Urogenital Sinus Anomaly e4  
*Ravibindu Sujeewa Ranawaka, Anju Goyal, Abdusamea Shabani, Supul Hennayake, Alan P. Dickson,  
and Raimondo M. Cervellione*

### ANNOUNCEMENTS OF FUTURE MEETINGS

- Announcements of Future Meetings 1985