



MAYO CLINIC PROCEEDINGS

www.mayoclinicproceedings.org




Table of Contents

October 2019 Volume 94 Number 10

The November online issue of *Proceedings* will be available by Friday, November 1.
Sign up for an alert to the online Table of Contents at www.mayoclinicproceedings.org

In The Limelight

1915 **In the Limelight: October 2019**

Karl A. Nath 

Editorials

1919 **Readmissions in Heart Failure: It's More Than Just the Medicine**

Yogesh N.V. Reddy and Barry A. Borlaug

1922 **Rethinking Prenatal Exercise Trials: How Can We Improve Translation?**

Tracey L. Weissgerber and Vesna D. Garovic

1925 **Obesity Paradox in Pulmonary Embolism: Myth or Reality?**

Philippe R. Bauer

1928 **Adiposity and Cardiovascular Risk in Children and Adolescents: Implications of the Amount of Fat Carried and Where**

Jose Castro-Piñero, Francisco B. Ortega, and Jonatan R. Ruiz

1931 **The Mayo Clinic Proceedings Thematic Review on Vaccines**

Priya Sampathkumar

Medical Image

1934 **Occult Femur Fracture**

Ming-Chen Tsai and Yi-Shin Chen


Perspective and Controversy

1936 **Treatment Over Objection—Moral Reasons for Reluctance**

Mark Christopher Navin, Jason Adam Wasserman, and Mark H. Haimann  

Original Articles

1939 **Readmissions Among Patients Admitted With Acute Decompensated Heart Failure Based on Income Quartiles**

Shantanu Patil, Mahek Shah, Brijesh Patel, Manyoo Agarwal, Pradhun Ram, and Venkata Mahesh Alla 


Patients in communities with the lowest quartile of income have a higher rate of readmission following the index heart failure admission, with high associated costs.

Continued

- 1951 Protective Effect of Exercise in Pregnant Women Including Those Who Exceed Weight Gain Recommendations: A Randomized Controlled Trial**
Mireia Pelaez, Silvia Gonzalez-Cerron, Rocío Montejo, and Rubén Barakat 🚫
 Promoting supervised exercise programs on the standard care protocols for pregnant women could be effective and cost-saving.
- 1960 Survival Benefit of Obese Patients With Pulmonary Embolism**
Karsten Keller, Lukas Hobohm, Thomas Münzel, Mir A. Ostad, Christine Espinola-Klein, Carl J. Lavie, Stavros Konstantinides, and Mareike Lankeit 🚫 +
 Obesity was associated with decreased in-hospital mortality rates in patients with pulmonary embolism relative to patients with normal weight or overweight.
- 1974 Regional Adipose Compartments Confer Different Cardiometabolic Risk in Children and Adolescents: The China Child and Adolescent Cardiovascular Health Study**
Yinkun Yan, Junting Liu, Xiaoyuan Zhao, Hong Cheng, Guimin Huang, and Jie Mi; for the China Child and Adolescent Cardiovascular Health (CCACH) Study Research Group
 Trunk fat mass and abdominal fat mass were positively associated with all cardiometabolic risk factors.
- 1983 Differences in Health Care Utilization in the Year Before Suicide Death: A Population-Based Case-Control Study**
Megan M. Chock, Jane C. Lin, Vidush P. Athyal, and J. Michael Bostwick 🚫 +
 Suicide decedents used more health care services and increased health care visits throughout the year before suicide death.
- 1994 Admission Braden Skin Score Independently Predicts Mortality in Cardiac Intensive Care Patients**
Jacob C. Jentzer, Nandan S. Anavekar, Jorge A. Brenes-Salazar, Brandon Wiley, Dennis H. Murphree, Courtney Bennett, Joseph G. Murphy, Mark T. Keegan, and Gregory W. Barsness 🚫 +
 A lower Braden skin score (indicating an increased risk of pressure-related skin injury) at the time of CICU admission predicted an increased risk of mortality.
- 2004 Early Detection of Pancreatic Cancer in Patients With Chronic Liver Disease Under Hepatocellular Carcinoma Surveillance**
Teru Kumagi, Takashi Terao, Tomoyuki Yokota, Nobuaki Azemoto, Taira Kuroda, Yoshiki Imamura, Kazuhiro Uesugi, Yoshiyasu Kisaka, Yoshinori Tanaka, Naozumi Shibata, Mitsuhiro Koizumi, Yoshinori Ohno, Atsushi Yukimoto, Kazuhiro Tange, Mari Nishiyama, Kozue Kanemitsu, Teruki Miyake, Hideki Miyata, Hiroshi Ishii, and Yoichi Hiasa; on behalf of the Ehime Pancreato-Cholangiology (EPOCH) Study Group 🚫
 Careful observation of the pancreas and special attention to the indirect features of pancreatic cancer are important during hepatocellular carcinoma surveillance.
- 2011 Cumulative Doses of Ionizing Radiation From Computed Tomography: A Population-Based Study**
Konrad H. Stopsack and James R. Cerhan +
 Doses were considerably higher in older patients, underweight and obese patients, smokers, black patients, and patients with lower educational status.
- 2022 Self-valuation: Attending to the Most Important Instrument in the Practice of Medicine**
Mickey T. Trockel, Maryam S. Hamidi, Nikitha K. Menon, Susannah G. Rowe, Jessica C. Dudley, Miriam T. Stewart, Cory Z. Geisler, Bryan D. Bohman, and Tait D. Shanafelt +
 Results of this current multicenter study suggest a strong association and a clear dose response relationship between physician self-valuation and burnout and between self-valuation and sleep-related impairment.


Continued

2032 Prognostic Importance and Predictors of Survival in Isolated Tricuspid Regurgitation: A Growing Problem

Erin A. Fender, Ioana Petrescu, Filip Ionescu, Chad J. Zack, Sorin V. Pislaru, Vuyisile T. Nkomo, Jordan J. Cochuvt, David O. Hodge, and Rick A. Nishimura 

Efforts to better characterize early markers of right ventricular dysfunction are needed to determine the optimal timing of referral for corrective therapies such as surgical intervention.

2040 Diagnostic Accuracy of Computed Tomography to Exclude Pheochromocytoma: A Systematic Review, Meta-analysis, and Cost Analysis


Edward Buitenwerf, Annika M.A. Berends, Antoinette D.I. van Asselt, Tijmen Korteweg, Marcel J.W. Greuter, Nic J.M. Veeger, Thera P. Links, Robin P.F. Dullaart, and Michiel N. Kerstens 

Pheochromocytomas can be reliably ruled out in cases of adrenal lesions with an unenhanced computed tomography attenuation value of 10 Hounsfield units or less.

Medical Image**2053 Acute Corneal Hydrops in Keratoconus With Atopic Dermatitis**

Shizuka Koh and Kohji Nishida

Consensus Recommendation**2054 The Mayo Clinic Histiocytosis Working Group Consensus Statement for the Diagnosis and Evaluation of Adult Patients With Histiocytic Neoplasms: Erdheim-Chester Disease, Langerhans Cell Histiocytosis, and Rosai-Dorfman Disease**

Gaurav Goyal, Jason R. Young, Matthew J. Koster, W. Oliver Tobin, Robert Vassallo, Jay H. Ryu, Caroline J. Davidge-Pitts, Maria D. Hurtado, Aishwarya Ravindran, Julio C. Sartori Valinotti, N. Nora Bennani, Mithun V. Shah, Karen L. Rech, and Ronald S. Go; on behalf of the Mayo Clinic Histiocytosis Working Group 


Special Article**2072 Medication-Assisted Treatment for Opioid-Use Disorder**

Tyler S. Oesterle, Nuria J. Thusius, Teresa A. Rummans, and Mark S. Gold 

Reviews**2087 Pure Autonomic Failure**

Elizabeth A. Coon, Wolfgang Singer, and Phillip A. Low 

2099 Regenerative Materials for Surgical Reconstruction: Current Spectrum of Materials and a Proposed Method for Classification

Ayushman Sharma, William A. Faubion, and Allan B. Dietz 

Please note that articles with an "e" page designation are available only in the online version of the Journal at www.mayoclinicproceedings.org

Residents' Clinic**2117 30-Year-Old Woman With Intractable Vomiting**

Jason D. Eckmann, Amrit K. Kamboj, and Conor G. Loftus

2122 63-Year-Old Woman With Abdominal Pain and Thrombocytopenia

Frederique St-Pierre, Aditya S. Pawar, and Rajiv Kumar

e117 78-Year-Old Woman With Intermittent Chest Pain and Palpitations

Bassim El-Sabawi, Park P. Zheng, and Allan S. Jaffe

Thematic Review on Vaccines**2127 Vaccines for Health Care Personnel**

Melanie D. Swift and Amy J. Behrman

Medical Image**2142 Esophageal Hematoma Mimicking a Large Esophageal Polyp: A Diagnostic Clue of Acquired Hemophilia A**

Kazunori Sugimura and Naoki Ishii

Letters to the Editor**2144 Blue Toes: An Unusual and Mysterious Presentation of Fibromuscular Dysplasia**

Emily L. Romanoff and Pahresah L. Roomiary

2145 Predicting When a Patient Would Be "Out of the Furrow"—A Perspective on Delirium Prediction

Sandeep R. Pagali, Donna M. Miller, and Dennis M. Manning

2146 Atrial Fibrillation and Morbidity and Mortality in Stress-Induced Cardiomyopathy

Dhrubajyoti Bandyopadhyay, Vardhmaan Jain, Eyal Herzog, and Carl J. Lavie

2148 In reply—Atrial Fibrillation and Morbidity and Mortality in Stress-Induced Cardiomyopathy

Daniel P. Morin, Michael L. Bernard, Christopher Madias, Paul A. Rogers, Sudarone Thihalolipavan, and N. A. Mark Estes III

Path to Patient Image Quiz**2150 Uterine Leiomyoma**

J. Kenneth Schoolmeester and Lori A. Erickson

Art at Mayo Clinic**e123 Mayo Clinic Alix School of Medicine Owl by Harold Crawford**

Margaret R. Wentz

Other Features**25A Professional Opportunities****2149 Corrections****Coming Soon...**

Undisclosed Financial Conflicts of Interest of Authors of Clinical Drug Trials Published in Influential Medical Journals

Using Patient Reported Outcomes in Oncology

Ultra-Processed Foods and Mortality

Diagnostic and Treatment Delay in Seronegative Rheumatoid Arthritis

Perioperative Cardiac Risk Prediction Indices

Robotic Mitral Valve Repair

Continued

Discontinuation of Angiotensin Converting Enzyme Inhibitors and Angiotensin Receptor Blockers in Chronic Kidney Disease

Vaccines for International Travel

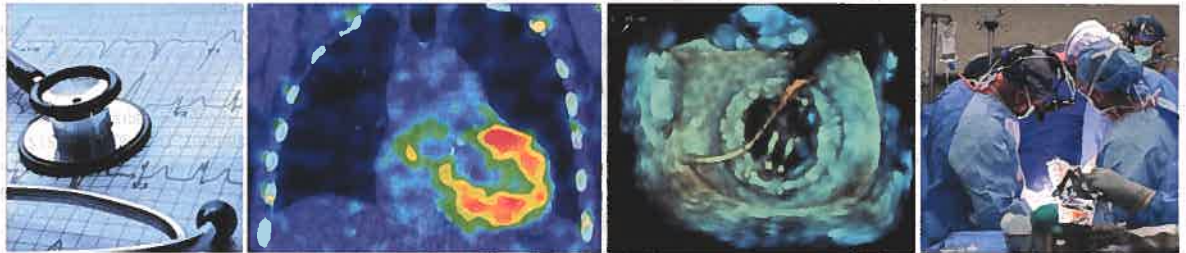
Chronic Constipation

Sequence of Splenectomy and Rituximab for Steroid-Refractory Immune Thrombocytopenia

Bilateral Herpetic Keratitis in Atopic Dermatitis






Glomerular Filtration Rate and Cardiovascular Outcomes

Cover Image



The cover image features a cardiovascular theme. The outer left panel displays the stethoscope, the time-honored instrument for listening; this symbolizes individualized care that listens and responds to the patient. Cardiac evaluation may involve a noninvasive office test, the ECG, and, where indicated, noninvasive imaging, in this case, a SPECT CT of the heart (left-of-center) showing increased uptake of technetium pyrophosphate in diagnosing wild-type transthyretin cardiac amyloidosis. The right-of-center panel is from a 3D echocardiogram, left atrium-view of a mechanical mitral bileaflet prosthesis sewing ring and prosthesis leaflets during percutaneous transcatheter closure of a perivalvular leak. A guide wire hovers over the prosthesis, and the imager is guiding the interventional cardiologist to position the tip of the guide wire through one of the perivalvular leak sites. The outer right panel depicts a surgical team involved in cardiac surgery and underscores the importance of teamwork.

Icon Key

-  This article has been given "Editor's Choice" distinction.
-  An author interview accompanies this article.
-  This article is online only at www.mayoclinicproceedings.org.
-  Supplemental material accompanies this article at www.mayoclinicproceedings.org.
-  Indicates articles focusing on health humanities and ethical decision making as applied to medicine and the health sciences.



"Mayo Clinic Proceedings," "Mayo," "Mayo Clinic," and the triple-shield Mayo Clinic logo are all registered marks of Mayo Foundation for Medical Education and Research.

MAYO CLINIC PROCEEDINGS (ISSN 0025-6196) is published monthly by Elsevier on behalf of Mayo Foundation for Medical Education and Research. Periodicals postage paid at New York, NY, and additional mailing offices. POST MASTER: Send address changes to Elsevier, Journal Returns, 1799 Highway 50 East, Linn, MO 65051, USA.



© 2019 Mayo Foundation for Medical Education and Research

Supplemental material attached to journal articles has not been edited, and the authors take responsibility for the accuracy of all data.