



MAYO CLINIC PROCEEDINGS

www.mayoclinicproceedings.org



Table of Contents

July 2020 Volume 95 Number 7

The August online issue of *Proceedings* will be available by Monday, August 3.
Sign up for an alert to the online Table of Contents at www.mayoclinicproceedings.org

In The Limelight

1301 In the Limelight: July 2020

Karl A. Nath

Editorials

1304 The 301 Classification: Old School Meets New School

Gabor Bagameri and John M. Stulak

1306 "Correlation Does Not Imply Causation": Bradford Hill, Causative Inference, and Obesity-Related Neuropathy

A. Gordon Smith

1310 Introduction to Thematic Reviews on Neurovascular Diseases

Robert D. Brown Jr., Giuseppe Lanzino, and David F. Kallmes

Medical Image

1313 Purple Fingers and Toes

Hadir Shakshouk and Julia S. Lehman

Commentaries

1315 The Odyssey of Risk Framing in Cardiovascular Medicine: A Patient-Centered Perspective

Mohamad Alkhouli and Charanjit S. Rihal

1318 Leaks of Clinical Trial Data and Research Integrity

S. Vincent Rajkumar and Priya Sampathkumar

Perspectives and Controversies

1320 Contact Tracing to Manage COVID-19 Spread—Balancing Personal Privacy and Public Health

Suraj Kapa, John Halamka, and Ramesh Raskar



1323 Time to Expand Access and Utilization of Home Dialysis: Lessons From the COVID-19 Pandemic

Lauren D. Stern and Sushrut Waikar

Continued

1325 Preventing HIV Outbreaks in Local Communities Among People Who Inject Drugs


Philip J. Peters

Original Articles**1329 The 301 Classification: A Proposed Modification to the Stanford Type B Aortic Dissection Classification for Thoracic Endovascular Aortic Repair Prognostication**Yang Y. Ge, Dan Rong, Xiao H. Ge, Jian H. Miao, Wei D. Fan, Xiao P. Liu, and Wei Guo  


The 301 classification, a modified Stanford classification system in the era of endovascular repair, appears to improve the risk stratification of patients with type B aortic dissection undergoing thoracic endovascular aortic repair.

1342 Central Obesity is Associated With Neuropathy in the Severely ObeseBrian C. Callaghan, Evan Reynolds, Mousumi Banerjee, Ericka Chant, Emily Villegas-Umana, and Eva L. Feldman 


Waist circumference, but not general obesity, is significantly associated with neuropathy.

1354 Marked Up-Regulation of ACE2 in Hearts of Patients With Obstructive Hypertrophic Cardiomyopathy: Implications for SARS-CoV-2–Mediated COVID-19J. Martijn Bos, Virginia B. Hebl, Ann L. Oberg, Zhifu Sun, Daniel S. Herman, Polakit Teekakirkul, Jonathan G. Seidman, Christine E. Seidman, Cristobal G. dos Remedios, Joseph J. Maleszewski, Hartzell V. Schaff, Joseph A. Dearani, Peter A. Noseworthy, Paul A. Friedman, Steve R. Ommen, Frank V. Brozovich, and Michael J. Ackerman 


The 5-fold increase in ACE2 protein may confer increased risk for COVID-19 manifestations and outcomes in patients with increased ACE2 transcript expression and protein levels in the heart.

1369 Cardiovascular Risk Factors and Atherosclerotic Cardiovascular Events Among Incident Cases of Systemic Sclerosis: Results From a Population-Based Cohort (1980-2016)Reto D. Kurrmann, Avneek S. Sandhu, Cynthia S. Crowson, Eric L. Matteson, Thomas G. Osborn, Kenneth J. Warrington, Rekha Mankad, and Ashima Makol 


The increased rate of cardiovascular events in patients with systemic sclerosis despite the absence of traditional cardiovascular risk factors warrants higher vigilance for cardiovascular disease in patients with systemic sclerosis.

1379 Cardiorespiratory Fitness and Incident Stroke Types: The FIT (Henry Ford Exercise Testing) ProjectMahmoud Al Rifai, Michael J. Blaha, Amjad Ahmed, Fatimah Almasoudi, Michelle C. Johansen, Waqas Qureshi, Sherif Sakr, Salim S. Virani, Clinton A. Brawner, Jonathan K. Ehrman, Steven J. Keteyian, and Mouaz H. Al-Mallah 

In a large ethnically diverse cohort of patients referred for treadmill stress testing, cardiorespiratory fitness is inversely associated with risk for ischemic and hemorrhagic stroke.

1390 Prevalence, Awareness, Treatment, and Poor Control of Hypertension Among Young American Adults: Race-Stratified Analysis of the National Health and Nutrition Examination SurveyVibhu Parcha, Nirav Patel, Rajat Kalra, Garima Arora, and Pankaj Arora 

Nearly one in every three non-Hispanic young black and one in every five young Mexican American and non-Hispanic white adults have hypertension.

1404 Efficacy and Safety of Tofacitinib, Baricitinib, and Upadacitinib for Rheumatoid Arthritis: A Systematic Review and Meta-AnalysisFaping Wang, Ling Sun, Shaohua Wang, John M. Davis, III, Eric L. Matteson, M. Hassan Murad, Fengming Luo, and Robert Vassallo 

Tofacitinib, baricitinib, and upadacitinib significantly improve rheumatoid arthritis control.

Continued



Brief Reports

1420 Drive-Through Testing: A Unique, Efficient Method of Collecting Large Volume of Specimens During the SARS-CoV-2 (COVID-19) Pandemic

Aditya Shah, Douglas Challener, Aaron J. Tande, Maryam Mahmood, John C. O'Horo, Elie Berbari, and Sarah J. Crane

1426 A Framework for Evidence Synthesis Programs to Respond to a Pandemic

M. Hassan Murad, Tarek Nayfeh, Meritxell Urtecho Suarez, Mohamed O. Seisa, Rami Abd-Rabu, Magdoleen Hassan Eltayeb Farah, Mohammed Firwana, Bashar Hasan, Tabinda Jawaid, Sahrish Shah, Victor Torres Roldan, Lary Prokop, Zhen Wang, and Samer Mohir Saadi

Medical Image

1430 Small Bowel Pseudomelanosis

Hyun Ji, Zongming E. Chen, and Sunanda V. Kane

Special Articles

1432 A Framework for Sustainable Contact Tracing and Exposure Investigation for Large Health Systems

Laura Breeher, Ashton Boon, Caitlin Hainy, M. Hassan Murad, Christopher Wittich, and Melanie Swift

1445 Obesity and Outcomes in COVID-19: When an Epidemic and Pandemic Collide

Fabian Sanchis-Gomar, Carl J. Lavie, Mandeep R. Mehra, Brandon Michael Henry, and Giuseppe Lippi

Reviews

1454 Treatment Considerations for COVID-19: A Critical Review of the Evidence (or Lack Thereof)

Prakhar Vijayvargiya, Zerelda Esquer Garrigos, Natalia E. Castillo Almeida, Pooja R. Gurram, Ryan W. Stevens, and Raymund R. Razonable

1467 A Collaborative Multidisciplinary Approach to the Management of Coronavirus Disease 2019 in the Hospital Setting

Raymund R. Razonable, Kelly M. Pennington, Anne M. Meehan, John W. Wilson, Adam T. Froemming, Courtney E. Bennett, Ariela L. Marshall, Abinash Virk, and Eva M. Carmona

1482 Hereditary Predisposition to Hematopoietic Neoplasms: When Bloodline Matters for Blood Cancers

Abhishek A. Mangaonkar and Mrinal M. Patnaik

Concise Review for Clinicians—CME Credit Offered

1499 Lactose Intolerance: A Concise Review to Skim the Surface

Claire L. Jansson-Knodell, Edward J. Krajicek, Dennis A. Savaiano, and Andrea S. Shin

Perspective

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

1506 63-Year-Old Woman With Fever, Generalized Weakness, and Syncope

Sarvenaz (Sarvie) Esmailzadeh, Fadi W. Adel, and John G. Park

e69 52-Year-Old Woman With Fever, Diaphoresis, and Abdominal Pain

Thomas J. Breen, Brenden S. Ingraham, and Jacob C. Jentzer

Thematic Review on Neurovascular Diseases

1512 Contemporary Management of Acute Ischemic Stroke Across the Continuum: From TeleStroke to Intra-Arterial Management

Bart M. Demaerschalk, Eugene L. Scharf, Harry Cloft, Kevin M. Barrett, Kara A. Sands, David A. Miller, and James F. Meschia

Thematic Review on Vaccines

1530 Immunization Strategies to Span the Spectrum of Immunocompromised Adults

Jennifer A. Whitaker

Medical Image

1549 Nodular Growths on the Lingual Surface of the Mandibular Jaw

Victoria C. Collier and Christopher D. Jackson

Letters to the Editor

1550 Rationing of Medical Supplies, Including Ventilators, for Patients With Kidney Disease

Gaurav Jain

1551 Comparison of Outcomes With Metformin and Sulfonylureas in Chronic Kidney Disease

Lary A. Weinrauch and John A. D'Elia

1552 In Reply — Comparison of Outcomes With Metformin and Sulfonylureas in Chronic Kidney Disease

Navdeep Tangri and Reid Whitlock

1552 Angiotensin-Converting Enzyme 2 and the Resolution of Inflammation: In Support of Continuation of Prescribed Angiotensin-Converting Enzyme Inhibitors and Angiotensin Receptor Blockers

Felice L. Gersh

1553 In reply—Angiotensin-Converting Enzyme 2 and the Resolution of Inflammation: In Support of Continuation of Prescribed Angiotensin-Converting Enzyme Inhibitors and Angiotensin Receptor Blockers

Fabian Sanchis-Gomar, Carl J. Lavie, Carme Perez-Quilis, Brandon M. Henry, and Giuseppe Lippi

Path to Patient Image Quiz

1557 Hepatic Focal Nodular Hyperplasia

Lori A. Erickson and Michael S. Torbenson

Stamp Vignette on Medical Science

e75 James Allison and Cancer Immunotherapy

David P. Steensma and Robert A. Kyle



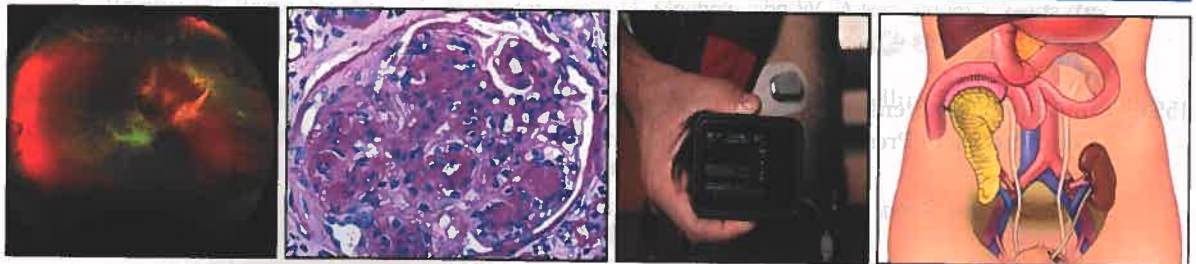
Art at Mayo Clinic

e77 Chandelier by Dale Chihuly
Margaret R. Wentz

Coming Soon...

- Acute QT Interval Modifications During Hydroxychloroquine-Azithromycin Treatment in COVID-19 Infection
- Clinical Trial Endpoints in Severe COVID-19
- Innovation Lessons From the COVID-19 Pandemic
- Indoor Environment and Viral Infections
- Cardiovascular Health in the COVID-19 Era
- Sex Differences in COVID-19 Case Fatality Rate
- Smell and Taste Dysfunction in Patients With COVID-19
- Sex Hormones and COVID-19
- The Telemedicine Musculoskeletal Examination
- Disorders of Consciousness and Disability Law
- Rational Statin Allocation for Primary Prevention
- SARS-CoV-2 Infection and COVID-19 During Pregnancy
- Disability Evaluation and Treatment for Patients With Psychiatric Disorders
- Acupuncture in Patients with Irritable Bowel Syndrome
- A Three-Stage Protocol for Serious Illness Conversations
- Adverse Events Reported to the FDA Related to Caffeine

Cover Image



For 2020, the theme chosen for the cover image is diabetes mellitus. This composite cover image shows on moving from left to right: an ultrawide field fundus photograph depicting severe proliferative diabetic retinopathy with tractional retinal detachment and vitreous hemorrhage (courtesy Dr Raymond Iezz); periodic acid-Schiff (PAS)-stained histologic image of diabetic nephropathy demonstrating diffuse and nodular diabetic glomerulosclerosis (courtesy Dr Sanjeev Sethi); loop glucose:insulin control system (the artificial pancreas) for the treatment of type 1 diabetes (courtesy Dr Yogish Kudva and Ms Shelly McCrady-Spitzer); and a pictorial representation of kidney and pancreas transplantation for type 1 diabetes (courtesy Dr Yogish Kudva, Dr Ravinder Kaur, and Ms Joanna King).