# In This Issue of JAMA

July 25, 2017 Volume 318, Number 4 Pages 311-400

#### Research

#### CARING FOR THE CRITICALLY ILL PATIENT

#### **Targeted Temperature Management for Cardiac Arrest**

Therapeutic hypothermia can preserve neurologic function in patients with cardiac arrest,

but the optimal duration of cooling has not been established. In a randomized clinical trial of 355 patients with out-of-hospital cardiac arrest, Kirkegaard and colleagues found no difference in 6-month neurologic outcome for patients who received targeted temperature management for 48 vs 24 hours. In an Editorial, Callaway discusses the challenges of designing trials of interventions with small effects that may vary by patient subgroups.

## Mobile Health Interventions and Infant Sleep Practices

Infant sleep practices such as prone positioning, bed sharing, and the use of soft bedding are associated with increased risk of sudden infant death syndrome. In a randomized clinical trial of 1600 mothers of healthy term newborns, Moon and colleagues found that a mobile health intervention, but not a nursing quality improvement intervention, improved adherence to safe sleep practices. In an Editorial, Shapiro-Mendoza suggests that mobile health interventions are likely to be less expensive than home visits or telephone coaching.

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### **Chronic Traumatic Encephalopathy in Football Players**



Chronic traumatic encephalopathy (CTE) is a progressive neurodegenerative disorder that is thought to be a consequence of repetitive head trauma. Mez and colleagues analyzed a case series of 202 players of American football whose brains were donated for research and found that a high proportion had neuropathological evidence of CTE. In an Editorial, Rabinovici describes the pathological features of CTE and suggests

that further research on the sequelae of repetitive trauma may rely on biomarkers of neurodegeneration that can be sampled from living patients.

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Author Video Interview jama.com CME jamanetwork.com/learning

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Editor in Chief Howard Bauchner, MD

**134 YEARS** OF CONTINUOUS

# In This Issue of JAMA

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#### Research (continued)

#### Genetic Variants, Serum Calcium, and Coronary Artery Disease

Some evidence suggests that calcium supplementation can increase the risk of cardiovascular events. Larsson and colleagues compared genomic data from 60 801 patients with coronary artery disease (CAD) with data from 123 504 individuals without CAD and found that a genetic predisposition to higher serum calcium levels was associated with increased risk of CAD and myocardial infarction.

#### **Clinical Review & Education**

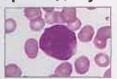
#### **GENOMICS AND PRECISION HEALTH**

## Screening for Familial Hypercholesterolemia

The risk of developing atherosclerotic cardiovascular disease for individuals with familial hypercholesterolemia can be reduced if the disorder is diagnosed and treated early in life. This JAMAInsights article by Knowles and colleagues explains how cascades creening is used to identify affected family members of patients with this dominantly inherited genetic disorder.

Author Audio Interview jama.com CME jamanetwork.com/learning

# Epistaxis, Ecchymoses, and Abnormal White Blood Cell Count 38



This JAMA Clinical Challenge by Sellers and Dinner presents a 42-year-old man with epistaxis, spontaneous ecchymoses, and a peripheral blood smear showing promyelocytes with bilobed nuclei and azurophilic cytoplasmic granules. What would you do next?

#### Metanephrines for Evaluating Palpitations and Flushing

This JAMA Diagnostic Test Interpretation article by Hannah-Shmouni and colleagues presents a 29-year-old woman with palpitations, flushing, pallor, and diaphoresis. A plasma sample had a high-level of normetanephrines. How do you interpret these test results?



JAMA Patient Page 400 Plantar Fasciitis

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Decline in Student Tobacco Use

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#### Editor's Audio Summary Howard Bauchner, MD, summarizes and comments on this week's issue.

#### **Author Interview**

VIDEO Interview with Ann C. McKee, MD, author of "Clinicopathological Evaluation of Chronic Traumatic Encephalopathy in Players of American Football"



AUDIO Interview with Joshua W. Knowles, MD, PhD, author of "Cascade Screening for Familial Hypercholesterolemia and the Use of Genetic Testing"

#### **Genomics and Precision Health**

A genomics glossary and related articles are available at jamagenetics.com.

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