Higher CVD risk, or lower risk? hs-cTn in diabetes

written by CAP TODAY
October 19, 2020

October 2020—When Elizabeth Selvin, PhD, MPH, of Johns Hopkins Bloomberg School of Public Health, began her studies of high-sensitivity cardiac troponin assays, they had not yet been approved in the U.S., as they are now, for use in diagnosing myocardial infarction. But some of her studies and those of Amy K. Saenger, PhD, DABCC, medical director of clinical laboratories and director of clinical chemistry at Hennepin County Medical Center in Minneapolis, take high-sensitivity cardiac troponin in a new direction by exploring its potential use as an aid in monitoring cardiovascular risk in the general population.

Uncharted season forges new paths for all hands

written by CAP TODAY
October 19, 2020

October 2020—Planning for respiratory season is always tricky but never more so than this year. “Uncharted territory for influenza” is how Frederick Nolte, PhD, D(ABMM), of the Medical University of South Carolina, describes the prospect of testing for influenza at the scale labs have been testing for SARS-CoV-2.

Molecular methods shown to push cases forward: Case studies in hematopathology

written by CAP TODAY
October 19, 2020

October 2020—B-ALL with aberrant expression of myeloid markers should be investigated further for specific gene abnormalities, including ZNF384 rearrangements, and microarray analysis may play an important role.

AMP case report: TET2TET—reconciling conflicting genomic reports

written by CAP TODAY
October 19, 2020

October 2020—After 20 years of CAP advocacy, synoptic reporting in surgical pathology is ubiquitous. This came about in part by fiat and in part by all parties agreeing on the importance of standardization for patient care. The merits of some elements remain controversial. Molecular pathology, a newer discipline, does not offer the scope for creative writing once available in surgical pathology.

MGMT promoter methylation: assays, implications

written by CAP TODAY
October 19, 2020

October 2020—With MGMT gene promoter methylation observed in about 50 percent of glioblastomas, it remains a biomarker of strong clinical interest in routine practice, even though it's not the sole determinant in decisions related to therapy. PCR and pyrosequencing are the most commonly used assays, and there's a technique that is not yet mainstream but gaining interest, said Tejus A. Bale, MD, PhD, assistant attending pathologist in the Department of Neuropathology and Diagnostic Molecular Pathology, Memorial Sloan Kettering Cancer Center. Dr. Bale spoke June 30 in the first of a series of Association for Molecular Pathology webinars on emerging and evolving biomarkers.

From the President's Desk: An access to care issue

written by CAP TODAY
October 19, 2020

October 2020—Many CAP TODAY readers know about my fondness for horse racing, so it will come as no surprise that I thoroughly enjoyed the belated running of the Kentucky Derby last month. I even made a few dollars from a small bet, which may be the only positive financial news I get in a year marked by COVID-19 and the threat of impending reimbursement cuts.

Clinical pathology selected abstracts

written by CAP TODAY
October 19, 2020

October 2020—Early in the COVID-19 pandemic, some reports linked ABO blood type to severity of the disease and test positivity. Among these were reports that blood type A was associated with a higher risk for SARS-CoV-2 infection and blood group O with a lower risk of infection and mortality. However, there is a paucity of data regarding the relationship between ABO blood type and severity of COVID-19. Therefore, the authors conducted a large multi-institutional observational study to determine if there is an association between ABO blood type and severity of COVID-19 and if those with specific blood types are more likely to test positive for the disease. For the study, they used a large multi-institutional database of adult patients who tested positive for SARS-CoV-2 at five major hospitals in Massachusetts from March 6 to April 16. The authors evaluated hospitalization, intubation, and death for an association with blood type.

Anatomic pathology selected abstracts

written by CAP TODAY
October 19, 2020

October 2020—Immune checkpoint inhibitors are frequently used to treat a variety of solid tumors. These drugs involve upregulation of cytotoxic T cells, which can lead to immune-related adverse events, including those involving the gastrointestinal tract. The authors conducted a study to characterize the histological features of immune checkpoint inhibitor therapy-associated gastritis. Gastric biopsies from patients on immune checkpoint inhibitor therapy who had clinical suspicion of drug-associated gastrointestinal injury were identified. The predominant histological pattern of injury, distribution of injury, degree of tissue eosinophilia, and prominence of apoptosis were recorded.

Molecular pathology selected abstracts

written by CAP TODAY
October 19, 2020

October 2020—An increase in the number of copies of a gene, or amplification, is regarded as the most common gain-of-function alteration across various cancer types. The authors developed a bioinformatics tool (Amplicon Architect) to identify extrachromosomal oncogene (ecDNA) amplification from whole genome sequencing (WGS) data based on three characteristic features: circularity of ecDNA, absence of a centromere, and high levels of amplification. The tool was validated in 44 cancer-derived cell lines known to have ecDNA. A combination of centromeric and noncentromeric FISH probes was used to identify extrachromosomal DNA, and the tool was able to classify 83 percent of these signals as representing circular ecDNA amplicons. Interestingly, some of these cases revealed the presence of concurrent extrachromosomal and intrachromosomal signals, suggesting that some ecDNA had reintegrated into the genome.

Q&A column

written by CAP TODAY
October 19, 2020

Q. What is the minimum cutoff value for total nucleated cells and red blood cells in body fluids after which we need to perform cytospin? Read answer.
Q. We treat all elevated troponins as critical values that necessitate a phone call to the ordering physician and documentation on the patient's chart. Is this necessary? How does it affect patient

treatment? Read answer.