Cytopathology in Focus: Use of cytologic samples to assess predictive biomarkers in metastatic breast cancer

written by CAP TODAY
May 18, 2024

May 2024—Breast cancer continues to remain a major global health issue and one of the main leading causes of cancer mortality among women worldwide. The majority of breast cancer mortality is attributed to its ability to metastasize. Bone, lung, liver, pleura, and brain are the most common sites of metastatic lesions, often spreading from invasive breast carcinoma of no special type.

Cytopathology in focus—Lymph node cytopathology: WHO system for reporting

written by CAP TODAY
May 18, 2024

May 2024—Fine-needle aspiration has been an important diagnostic tool for the workup of patients with abnormal enlargement of lymph nodes and related organs, including the spleen and thymus.

From the President's Desk

written by CAP TODAY
May 18, 2024

May 2024—You may have read my column in the March issue about how the CAP is taking care of the next generation of pathologists by helping and engaging our new-in-practice colleagues. If you're a more seasoned pathologist, you may be wondering: What about me?

Confronting diagnostic gaps in fungal infection

written by CAP TODAY
May 18, 2024

April 2024—It's readily apparent in the patient populations at Johns Hopkins Hospital, where he is director of the mycology laboratory. Especially concerning is the increase in *Candida auris* following the height of the COVID-19 pandemic, both in terms of colonization and infection cases, says Dr. Zhang, who is also associate professor of pathology, Division of Medical Microbiology, Department of Pathology, Johns Hopkins University School of Medicine. "Since 2022, we suddenly saw an uptick in *Candida auris* cases across the Johns Hopkins Health System."

Clinical pathology selected abstracts

written by CAP TODAY
May 18, 2024

May 2024—Massive hemorrhage is a major cause of death in children, and the mortality rate from life-threatening hemorrhage is estimated to be 20 to 51 percent. To counter this high mortality rate, clinicians have sought to standardize massive transfusion protocols and hemostatic resuscitation, ensuring that protocols support balanced blood-based resuscitation or the use of low titer group O whole blood, or both. These protocols may include using the lysine analogue antifibrinolytics tranexamic acid (TXA) and epsilon aminocaproic acid (EACA) in children with life-threatening hemorrhage (LTH). However, use of these antifibrinolytics is much more common in adult trauma patients. Study data suggest that TXA may increase survival outcomes in adults with traumatic injury, postpartum hemorrhage, nontraumatic intracranial hemorrhage, and all-cause bleeding.

NxTag respiratory panel v2 gets FDA clearance

written by CAP TODAY
May 18, 2024

May 17, 2024—Diasorin received FDA 510(k) clearance for its NxTag Respiratory Pathogen Panel v2.

Anatomic pathology selected abstracts

written by CAP TODAY
May 18, 2024

May 2024—The Bethesda System for Reporting Thyroid Cytopathology described four subclasses of atypia within the atypia of undetermined significance category: nuclear (AUS-Nuc), architectural (AUS-A), oncocytic (AUS-Onc), and atypia not otherwise specified (AUS-NOS). Accumulating evidence supports the use of a binary AUS subclassification scheme based primarily on the presence of nuclear atypia only. The authors conducted a study to compare the risk stratification of binary versus four-tier AUS subclassification systems among AUS nodules with molecular or histologic follow-up, or both. The study included thyroid aspirates classified as AUS and tested using Afirma (Veracyte Inc.) between June 2013 and July 2021. Histological classification was considered the final outcome for resected nodules.

Molecular pathology selected abstracts

written by CAP TODAY
May 18, 2024

May 2024—Immunotherapy has revolutionized cancer treatment by recruiting the patient's immune system to detect and destroy cancer cells. Immunotherapy often involves immune checkpoint blockade (ICB) agents, which target negative regulators of T-cell activation, such as cytotoxic T lymphocyte-associated protein 4 (CTLA-4), programmed cell death protein 1 (PD-1), or programmed death-ligand 1 (PD-L1). Although ICB is used to treat a variety of cancer types, patients' response to therapy is often unpredictable, and biomarkers such as tumor mutation burden, mismatch repair deficiency, and IHC for PD-L1 have limitations for assessing ICB response. Consequently, there is great interest in discovering additional biomarkers that will improve the ability to predict clinical response to ICB. Recent studies have explored the hypothesis that there may be a correlation between a person's gut microbiome and therapeutic response.

Q&A column

written by CAP TODAY
May 18, 2024

May 2024
Q. I know that CLIA is changing and more tests/analytes will become CMS regulated, along with other changes. Can you provide some background and an overview of the changes and when they will become effective? Read answer.

Newsbytes

written by CAP TODAY
May 18, 2024

May 2024—The FDA has granted marketing authorization, through the de novo pathway, for Prenosis' Sepsis ImmunoScore artificial intelligence-enabled software as a medical device, or SaMD, for the rapid diagnosis and prediction of sepsis.