



دانشگاه علوم پزشکی سمنان
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معاونت آموزشی و پژوهشی بیمارستان کوثر
کتابخانه

اخبار uptodate در یک نگاه

What's New

NOVEMBER 2020

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ترجمه، گردآوری و تدوین : س. کاشیان
کارشناس علم اطلاعات و دانش شناسی

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در پایگاه uptodate بخشی به نام What's new وجود دارد که ارائه دهنده آخرین اخبار حوزه پزشکی به تفکیک موضوعی است. این بخش شامل ۲۶ مقوله پزشکی است که هر کدام در برگیرنده مهم ترین اطلاعات جدید اضافه شده به پایگاه در هفته های اخیر می باشند.

در ادامه همه مقوله هایی که دارای اخبار و اطلاعات جدید در نیمه اول ماه نوامبر هستند به ترتیب الفبای عنوان ارائه شده است.

موضوعات فهرست ذیل دارای اخبار جدید در این بازه زمانی هستند:

- [Anesthesiology](#)
- [Cardiovascular medicine](#)
- [Emergency medicine](#)
- [Family medicine](#)
- [Infectious diseases](#)
- [Nephrology and hypertension](#)
- [Neurology](#)
- [Obstetrics and gynecology](#)
- [Oncology](#)
- [Pediatrics](#)
- [Sleep medicine](#)
- [Surgery](#)

What's new in **anesthesiology**

OBSTETRIC ANESTHESIA

Labor epidurals and autism (November 2020)

Whether any aspect of labor affects the risk of autism spectrum disorders (ASD) in offspring is an active area of investigation. In a retrospective birth cohort study including 148,000 vaginal deliveries, the frequency of ASD was higher in children of mothers who had labor epidural analgesia (LEA) than in children of mothers who did not have LEA (1.9 versus 1.3 percent) [3]. However, there were significant methodologic problems with the study, such as important demographic differences between the study groups and lack of details regarding the course of labor and delivery. After review of all available data, we believe that there is no convincing evidence that LEA causes ASD and no evidence that choosing another form of labor analgesia reduces the risk of ASD. (See "[Adverse effects of neuraxial analgesia and anesthesia for obstetrics](#)", section on 'Epidural analgesia and childhood autism'.)

What's new in **cardiovascular medicine**

PERCUTANEOUS CORONARY INTERVENTION

Duration of dual antiplatelet therapy after percutaneous coronary intervention and drug-eluting stents (November 2020)

Patients with stable coronary artery disease who undergo percutaneous coronary intervention (PCI) with drug-eluting stents require dual antiplatelet therapy (DAPT) to prevent acute myocardial infarction, but the optimal duration of treatment remains uncertain. In a 2020 network meta-analysis of 24 randomized trials including over 79,000 patients with a median follow-up of 18 months, extended-term (>12 months) DAPT reduced the risk of myocardial infarction but had a higher risk of major bleeding compared with 12-month, midterm (6-month), and short-term (<6 months) DAPT followed by [aspirin](#) or P2Y₁₂ monotherapy [22]. Compared with 12-month DAPT, short-term DAPT followed by P2Y₁₂ monotherapy reduced the risk of major bleeding. Our recommendations for the duration of DAPT emphasize the importance of taking into account an individual patient's ischemic and bleeding risks. (See "[Long-term antiplatelet therapy after coronary artery stenting in stable patients](#)", section on 'Evidence'.)

What's new in emergency medicine

TRAUMA

e-FAST in children with blunt abdominal trauma (November 2020)

Extended focused assessment with sonography for trauma (e-FAST), a bedside ultrasound examination of four abdominal locations, lungs, and heart, aids in the rapid detection of intra-abdominal injury (IAI) in unstable children with blunt torso trauma. In hemodynamically stable children, however, meta-analyses of observational studies, have shown inadequate sensitivity to exclude IAI. In a retrospective study of 354 children with blunt torso trauma (14 percent with IAI), e-FAST combined with physical examination had a sensitivity of 88 percent and a negative predictive value of 97 percent for identifying IAI [22]; for IAI requiring acute intervention, sensitivity and negative predictive value were both 100 percent. Although larger prospective studies are needed to confirm these findings, e-FAST in combination with physical examination findings may provide useful clinical information to guide further evaluation and management. However, e-FAST alone should **not** be used to determine the need for further investigation (eg, abdominal computed tomography [CT]) in hemodynamically stable children with blunt torso trauma. (See ["Trauma management: Approach to the unstable child", section on 'e-FAST \(extended focused assessment with sonography for trauma\)'](#).)

What's new in family medicine

ADULT NEUROLOGY AND PSYCHIATRY

Galcanezumab for migraine prevention in refractory patients (November 2020)

Calcitonin gene-related peptide (CGRP) antagonists are a novel class of medications that expand therapeutic options for effective migraine prevention. In a trial of 462 patients who did not respond to other preventive medications, those assigned to [galcanezumab](#), an injectable CGRP antagonist, had a significant reduction in migraines, reporting four fewer headache-days per month compared with baseline [62]. These data support the use of galcanezumab for patients whose symptoms do not respond to first-line preventive agents. (See ["Preventive treatment of episodic migraine in adults", section on 'CGRP antagonists'](#).)

OBSTETRICS

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Metformin treatment of diabetes in pregnancy (November 2020)

Data continue to accrue regarding the potential benefits and adverse effects of [metformin](#) use during pregnancy. In a trial in which pregnant women with type 2 diabetes were randomly assigned to receive insulin alone or both insulin and metformin, combined treatment improved maternal glycemic control, reduced total gestational weight gain, and reduced the frequency of large for gestational age and macrosomic newborns; however, the rate of small for gestational age newborns was higher [83]. In most patients with preexisting diabetes on metformin, we recommend not continuing metformin beyond the transition to insulin before or in early pregnancy, given concerns about the increased risks for small for gestational age newborns and previous data showing an increased risk for childhood adiposity. (See "[Pregestational \(preexisting\) diabetes mellitus: Glycemic control during pregnancy](#)", section on 'Specific drugs'.)

COVID-19 course in pregnancy (November 2020)

Pregnant women should be counseled about increasing evidence that they are at higher risk for severe illness from COVID-19. In a report from the US Centers for Disease Control and Prevention (CDC) that included over 23,000 pregnant women and over 386,000 nonpregnant women of reproductive age with symptomatic laboratory-confirmed SARS-CoV-2 infection, pregnant patients had higher rates of intensive care unit admission (10.5 versus 3.9 per 1000 cases), invasive ventilation (2.9 versus 1.1 per 1000 cases), and death (1.5 versus 1.2 cases per 1000) [84]. In another CDC report, hospitalized pregnant women with COVID-19 had slightly higher rates of preterm birth (PTB) and cesarean delivery (CD) compared with national averages (PTB: 12.9 versus 10.2 percent; CD: 34 versus 31.9 percent) [85]. (See "[Coronavirus disease 2019 \(COVID-19\): Pregnancy issues and antenatal care](#)", section on 'Maternal course'.)

What's new in **infectious diseases**

VIRAL INFECTIONS, NON-HIV

Lopinavir/ritonavir plus interferon beta-1b for MERS-CoV (November 2020)

Management of Middle East respiratory syndrome coronavirus (MERS-CoV) infection consists of supportive care only, although a number of antiviral and immunomodulating agents are being evaluated. In a double-blind trial of 95 patients with laboratory-confirmed MERS-CoV infection in Saudi Arabia, all-cause 90-day mortality was lower among those randomly assigned to lopinavir/[ritonavir](#) plus subcutaneous interferon beta-1b compared with placebo (28 versus 44 percent), and there were no excess adverse events with the intervention [41]. However, the trial was stopped early because of the apparent benefit, and this could have overestimated the treatment effect. Further studies are warranted to confirm this finding before the combination can be routinely recommended. (See "[Middle East respiratory syndrome coronavirus: Treatment and prevention](#)", section on 'Treatment'.)

What's new in **nephrology and hypertension**

ACUTE AND CHRONIC KIDNEY DISEASE

Finerenone in patients with diabetic kidney disease (November 2020)

Finerenone, a nonsteroidal selective mineralocorticoid receptor antagonist (MRA), produces less hyperkalemia than steroidal MRAs (eg, [spironolactone](#)) but may retain other putative benefits of antagonizing the mineralocorticoid receptor, such as reducing inflammation and fibrosis. In the Finerenone in Reducing Kidney Failure and Disease Progression in Diabetic Kidney Disease (FIDELIO-DKD) trial, in which nearly 6000 patients with type 2 diabetes and either severely elevated albuminuria or moderately elevated albuminuria plus retinopathy were randomly assigned to finerenone or placebo, those taking finerenone had a slower decline in estimated glomerular filtration rate and nonsignificantly lower rates of end-stage kidney disease and all-cause mortality [1]. However, the additive benefit of finerenone in patients with diabetic kidney disease who are taking both an angiotensin inhibitor and a sodium-glucose co-transporter 2 (SGLT2) inhibitor has not been evaluated, and therefore the role of finerenone in the treatment of diabetic kidney disease remains to be established. (See "[Treatment of diabetic kidney disease](#)", section on 'Type 2 diabetes: Treat with SGLT2 inhibitors'.)

Regional citrate anticoagulation superior to systemic heparin for anticoagulation with continuous kidney replacement therapy (November 2020)

Patients on continuous kidney replacement therapy (CKRT) are commonly treated with anticoagulation to prevent thrombosis of the dialysis filter; the choice of anticoagulation strategy continues to be debated. In a randomized trial of approximately 600 critically ill patients with acute kidney injury receiving CKRT, patients treated with [regional citrate anticoagulation](#), compared with those treated with systemic heparin infusion, had a longer filter life span (47 versus 26 hours) but also a higher frequency of new infections (68 versus 55 percent) [2]. Rates of 90 day mortality were similar between the groups. This study supports our preference of regional citrate anticoagulation over systemic heparin for anticoagulation with CKRT. (See "[Anticoagulation for continuous kidney replacement therapy](#)", section on 'Patients with repeated clotting of hemofilter'.)

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HEADACHE

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What's new in **obstetrics and gynecology**

PRENATAL OBSTETRICS

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INTRAPARTUM AND POSTPARTUM OBSTETRICS

Labor epidurals and autism (November 2020)

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What's new in **oncology**

GENITOURINARY ONCOLOGY

Long-term survival with nivolumab in refractory metastatic renal cell carcinoma (November 2020)

In patients with metastatic renal cell carcinoma (RCC) who have progressed on antiangiogenic therapy, subsequent immunotherapy with [nivolumab](#) is an established treatment option, but long-term survival outcomes have not been previously reported. In extended follow-up of a phase III trial (Checkmate 025), among approximately 800 patients with metastatic RCC and disease progression on at least one previous vascular endothelial growth factor (VEGFR) inhibitor, nivolumab improved both five-year overall (26 versus 18 percent) and progression-free (5 versus 1 percent) survival compared with [everolimus](#) [30]. For patients with metastatic RCC refractory to VEGFR inhibitor therapy, we continue to offer nivolumab as an option for subsequent therapy. (See "[Systemic therapy of advanced clear cell renal carcinoma](#)", section on 'Nivolumab'.)

THORACIC ONCOLOGY

Nivolumab plus ipilimumab in pleural mesothelioma (November 2020)

Chemotherapy has long been the mainstay of treatment for unresectable pleural mesothelioma. Now, in preliminary results of a phase III trial including over 600 patients with advanced, treatment-naïve mesothelioma, immunotherapy with [nivolumab](#) plus [ipilimumab](#) improved overall survival compared with a platinum agent plus [pemetrexed](#) (18 versus 14 months), with greatest benefit for those with nonepithelioid histologies [70]. Grade ≥3 treatment-related adverse events occurred in approximately one-third of patients in both groups, but more patients discontinued treatment due to toxicity in the immunotherapy group. For those with unresectable pleural mesothelioma and nonepithelioid histologies, we now suggest initial treatment with nivolumab plus ipilimumab rather than chemotherapy. Nivolumab plus ipilimumab is also an appropriate option for those with epithelioid histology cancers who prefer to avoid chemotherapy. (See "[Systemic treatment for unresectable malignant pleural mesothelioma](#)", section on 'Nivolumab plus ipilimumab'.)

What's new in **pediatrics**

DEVELOPMENTAL AND BEHAVIORAL PROBLEMS

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ENDOCRINOLOGY

Hybrid artificial pancreas for children ≥6 years with type 1 diabetes (November 2020)

A hybrid artificial pancreas (closed-loop insulin pump system that automatically adjusts insulin delivery in response to continuous glucose monitoring) has shown favorable outcomes in randomized trials in adolescents and adults. In a new randomized trial of 101 children (age 6 to 13 years), individuals assigned to a hybrid artificial pancreas had increased time in target range for blood glucose compared with a sensor-augmented insulin pump (67 versus 55 percent over an average duration of 16 weeks) [26]. The time below the target range (<70 mg/dL) was low for both groups; there were no episodes of severe hypoglycemia or diabetic ketoacidosis in either group. If replicated in larger and longer duration trials, these results suggest that hybrid artificial pancreas systems may permit better control of blood glucose in children without significant adverse effects. (See ["Insulin therapy for children and adolescents with type 1 diabetes mellitus", section on 'Closed-loop insulin pumps'.](#))

What's new in **sleep medicine**

CENTRAL DISORDERS OF HYPERSOMNOLENCE

Pitolisant approved for cataplexy in adults with narcolepsy type 1 (November 2020)

[Pitolisant](#), an oral histamine H3 receptor inverse agonist that is available for treatment of daytime sleepiness in adults with narcolepsy, is now approved by the US Food and Drug Administration (FDA) for treatment of cataplexy as well [3]. In a previous trial in adults with narcolepsy type 1, pitolisant reduced the weekly cataplexy rate more than placebo (75 versus 35 percent reduction from baseline rate). Rare cases of allergy and anaphylaxis have been reported in post-marketing surveillance. While rapid eye movement (REM) suppressing drugs such as [venlafaxine](#) remain a first-line treatment for cataplexy, pitolisant is an alternative to [sodium oxybate](#) in patients who require a second-line therapy. (See "[Treatment of narcolepsy in adults](#)", section on 'Pitolisant'.)

What's new in **surgery**

BARIATRIC SURGERY

The effect of bariatric surgery on life expectancy and mortality rate (November 2020)

Although bariatric surgery has many health benefits, its effect on life expectancy has been unclear.

- In a study that followed participants in the Swedish Obese Subjects study and a random sample of the general population for over 20 years, the adjusted median life expectancy of obese individuals who underwent bariatric surgery was 3 years longer than that of those who received usual obesity care, but 5.5 years shorter than that in the general population [4].
- In a Canadian population-based study, the five year all-cause mortality rate of over 13,000 individuals who underwent bariatric surgery was lower than that of matched obese individuals (1.4 versus 2.5 percent) [5].

In both studies, bariatric surgery was associated with cardiovascular and cancer mortality rates 30 to 50 percent lower than those of nonsurgical management. These findings add to previous data supporting bariatric surgery as a means to improve many obesity-related health problems. (See "[Outcomes of bariatric surgery](#)", section on 'Long-term survival'.)

VASCULAR AND ENDOVASCULAR SURGERY

Blood pressure targets in patients with peripheral artery disease (November 2020)

Controlling hypertension reduces the risk of major adverse cardiovascular events (MACE); however, aggressive blood pressure (BP) lowering could also increase the risk of major adverse limb events (MALE) in patients with peripheral artery disease (PAD). In a study of data from the EUCLID trial (Examining the Use of [Ticagrelor](#) in Peripheral Artery Disease), which included over 13,000 participants with symptomatic PAD of whom 78 percent had a clinical history of hypertension, those with systolic or diastolic BPs above or below the standard target range had a greater risk of MACE and those with systolic BPs above (but not below) this level had a greater risk of MALE [15]. These findings support the use of standard BP targets for those with PAD. (See "[Overview of lower extremity peripheral artery disease](#)", [section on 'Blood pressure control'](#).)