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کتابخانه

## اخبار uptodate در یک نگاه

What's New

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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.

این محتوا با توالی ۲ شماره در ماه تهیه می شود تا اطلاع رسانی اخبار این پایگاه معتبر، به هنگام صورت گرفته و اطلاعات جدید آن در کوتاه ترین زمان ممکن به اطلاع اساتید و پزشکان رسانده شود.

در ادامه همه مقوله هایی که دارای اخبار و اطلاعات جدید در ماه سپتامبر (از ۱۷ تا ۳۰ سپتامبر) هستند به ترتیب الفبای عنوان موضوع ارائه شده است.

**What's new in allergy and immunology**

**What's new in cardiovascular medicine**

**What's new in dermatology**

**What's new in drug therapy**

**What's new in endocrinology and diabetes mellitus**

**What's new in family medicine**

**What's new in infectious diseases**

**What's new in palliative care**

**What's new in pediatrics**

**What's new in sports medicine (primary care)**

**What's new in rheumatology**

# What's new in allergy and immunology

September 2020

## FOOD ALLERGY AND INTOLERANCE

### Guidelines for peanut allergy diagnosis (September 2020)

Updated United States consensus guidelines from a panel of experts regarding peanut allergy diagnosis have been published [7]. Consistent with this practice parameter, we advise against testing if the clinical history suggests that the probability of a peanut allergy is low. For patients with a history suggestive of an immunoglobulin E (IgE)-mediated reaction, reasonable testing options include skin prick testing with whole peanut extract, immunoassay for whole peanut-specific IgE, or peanut protein component testing. Testing peanut protein component Ara h 2 alone provides higher diagnostic accuracy than skin testing or immunoassay for whole peanut. (See "[Peanut, tree nut, and seed allergy: Diagnosis](#)", section on 'Diagnostic approach'.)

# What's new in cardiovascular medicine

September 2020

## HEART FAILURE

### Empagliflozin for heart failure with reduced ejection fraction (September 2020)

Randomized trials have found that sodium-glucose cotransporter 2 (SGLT2) inhibitors ([dapagliflozin](#), [empagliflozin](#), or [canagliflozin](#)) reduced the risk of heart failure (HF) hospitalization in adults with type 2 diabetes mellitus (most without prior HF). The DAPA-HF trial found that dapagliflozin reduced HF hospitalization and cardiovascular death in patients with HF with reduced ejection fraction (HFrEF), with or without diabetes; this study primarily enrolled patients with mild to moderate left ventricular systolic dysfunction. In the recent EMPEROR-Reduced trial, which evaluated the effects of empagliflozin in patients with HFrEF with more severe left ventricular dysfunction, empagliflozin reduced HF hospitalization compared with placebo, regardless of the presence of diabetes; rates of cardiovascular death were not significantly different between the groups [6]. Based on these findings, we include an SGLT2 inhibitor among the secondary therapies for HFrEF in patients with type 2 diabetes ([dapagliflozin](#), [empagliflozin](#), or [canagliflozin](#)) and without diabetes ([dapagliflozin](#) or [empagliflozin](#)). (See "[Secondary pharmacologic therapy in heart failure with reduced ejection fraction \(HFrEF\) in adults](#)", section on 'Empagliflozin'.)

### SGLT2 inhibitors and risk of diabetic ketoacidosis (September 2020)

In a population-based cohort study from Canada and the United Kingdom including more than 350,000 patients and 500 diabetic ketoacidosis (DKA) events, SGLT2 inhibitors ([empagliflozin](#), [dapagliflozin](#), [canagliflozin](#)), as compared with dipeptidyl peptidase 4 (DPP-4)

inhibitors, were associated with an increased risk of DKA (incidence 2.03 versus 0.75 per 1000 person-years) [7]. SGLT2 inhibitors should not be used in individuals with type 1 diabetes or in individuals with type 2 diabetes who have factors predisposing to DKA (eg, pancreatic insufficiency, drug or alcohol use disorder). (See "[Sodium-glucose co-transporter 2 inhibitors for the treatment of hyperglycemia in type 2 diabetes mellitus](#)", section on 'Diabetic

## OTHER CARDIOLOGY

### **Influenza and acute cardiovascular events (September 2020)**

The respiratory morbidity and mortality of influenza are well recognized; the cardiovascular burden is also substantial but often underrecognized. In a cross-sectional study including more than 80,000 adults with influenza, nearly 12 percent had an acute cardiovascular event, most commonly acute heart failure (aHF) and acute ischemic heart disease (aIHD) [36]. Among study patients hospitalized with influenza, those who were vaccinated were significantly less likely to develop aHF and aIHD than those who were unvaccinated. These findings emphasize the importance of vaccination as secondary prevention for influenza-associated acute cardiovascular events. (See "[Seasonal influenza in adults: Transmission, clinical manifestations, and complications](#)", section on 'Cardiac complications'.)

## What's new in dermatology

September 2020

## ATOPIC DERMATITIS AND OTHER DERMATITIS

### **Dupilumab for children aged six years and older with severe atopic dermatitis (September 2020)**

Evidence for the efficacy of [dupilumab](#), an interleukin (IL)-4 and IL-13 receptor-alpha antagonist for the treatment of children aged six years and older with moderate to severe AD not adequately controlled with topical prescription therapies is limited. In a phase 3, randomized trial that included 367 children aged 6 to 11 years with severe AD treated with dupilumab or placebo plus mid-potency topical corticosteroids, more children in the dupilumab groups than in the placebo groups achieved "clear or almost clear" skin (investigator global assessment score) or a 75 percent improvement of their EASI score at 16 weeks, compared with baseline [3]. The frequency of adverse events were similar in all groups. Injection site reactions and conjunctivitis were more common among patients receiving dupilumab. We generally prefer narrowband ultraviolet B (NB-UVB) phototherapy to systemic immunosuppressive therapies for older children with severe AD who can cooperate with treatment. However, based on its overall good safety profile, we suggest dupilumab rather than other systemic immunosuppressive therapies if NB-UVB is not accessible or impractical. (See "[Treatment of atopic dermatitis \(eczema\)](#)", section on 'Studies in children and adolescents' and "[Management of severe atopic dermatitis \(eczema\) in children](#)".)

### **Nemolizumab for the treatment of atopic dermatitis (September 2020)**

Previous phase 2 studies indicated that nemolizumab, an investigational humanized monoclonal antibody against receptor A of IL-31, is effective in reducing pruritus in adults with atopic dermatitis (AD). In a randomized, phase 3 trial that included 215 patients aged 13 years or older with AD and moderate to severe pruritus, nemolizumab reduced the average pruritus visual analogue scale score by 43 percent, compared with 21 percent in the placebo group [4]. All patients used concomitant topical therapy for AD. Adverse events occurred in approximately 70 percent of patients in both groups and were generally mild. Although nemolizumab appears to be a promising agent for the treatment of pruritus and the interruption of the itch-scratch cycle in patients with AD, larger studies of longer durations are needed to evaluate its long-term efficacy and safety. (See "[Treatment of atopic dermatitis \(eczema\)](#)", section on '[Anti-IL-31 antibodies \(nemolizumab\)](#)'.)

## **What's new in drug therapy**

**September 2020**

### **ADVERSE REACTIONS AND WARNINGS**

#### **Atypical femur fractures and chronic bisphosphonate therapy (September 2020)**

Atypical femur fractures are a rare complication of chronic bisphosphonate therapy. In a prospective cohort study of 196,129 women  $\geq 50$  years of age treated with a bisphosphonate for osteoporosis, there were 1.74 atypical fractures per 10,000 person-years during the 10-year follow-up [81]. The risk of atypical fractures increased with longer duration of bisphosphonate use (beyond three to five years), age 65 to 84 years compared with either younger or older women, Asian ethnicity, glucocorticoid use  $\geq 1$  year, shorter height, and higher weight; risk decreased with discontinuation of bisphosphonates. For most women, the absolute risk of an atypical fracture was low compared with the decrease in risk of osteoporotic fracture. For women at low risk for fracture in the near future (eg, stable bone mineral density [BMD], no previous vertebral fractures), we suggest discontinuing bisphosphonates after three to five years. (See "[Risks of bisphosphonate therapy in patients with osteoporosis](#)", section on '[Atypical femur fractures](#)'.)

### **VACCINES**

#### **Updated indications for hepatitis A vaccination (September 2020)**

The United States Advisory Committee on Immunization Practices (ACIP) released new guidelines for prevention of hepatitis A virus (HAV) infection in July 2020 [94]. These include a new recommendation to vaccinate individuals in settings that provide services to adults at increased risk for HAV infection (eg, substance use treatment or support centers, group homes, and nonresidential day care facilities for developmentally disabled persons). In addition, the guidelines recommend catch-up vaccination for all children and adolescents aged 2 to 18 years

who have not previously received HAV vaccine. Vaccination of persons who receive blood products for clotting disorders (eg, hemophilia) is no longer recommended. We are in agreement with this guidance. (See ["Hepatitis A virus infection: Treatment and prevention", section on 'Indications'](#).)

## What's new in **endocrinology and diabetes mellitus**

September 2020

### OSTEOPOROSIS

#### **Atypical femur fractures and chronic bisphosphonate therapy (September 2020)**

Atypical femur fractures are a rare complication of chronic bisphosphonate therapy. In a prospective cohort study of 196,129 women  $\geq 50$  years of age treated with a bisphosphonate for osteoporosis, there were 1.74 atypical fractures per 10,000 person-years during the 10-year follow-up [13]. The risk of atypical fractures increased with longer duration of bisphosphonate use (beyond three to five years), age 65 to 84 years compared with either younger or older women, Asian ethnicity, glucocorticoid use  $\geq 1$  year, shorter height, and higher weight; risk decreased with discontinuation of bisphosphonates. For most women, the absolute risk of an atypical fracture was low compared with the decrease in risk of osteoporotic fracture. For women at low risk for fracture in the near future (eg, stable bone mineral density [BMD], no previous vertebral fractures), we suggest discontinuing bisphosphonates after three to five years. (See ["Risks of bisphosphonate therapy in patients with osteoporosis", section on 'Atypical femur fractures'](#).)

## What's new in **family medicine**

September 2020

### OBSTETRICS

#### **New device for treating postpartum hemorrhage due to atony (September 2020)**

A novel device has been developed that applies low-level intrauterine vacuum (70 to 90 mmHg) to rapidly evacuate blood and facilitate physiologic uterine contraction in patients with postpartum hemorrhage (PPH) due to atony unresponsive to uterotonic drugs and uterine massage. In a prospective multicenter single-arm treatment study of such patients, the device controlled bleeding in 100 of 106 participants (94 percent), typically within 2 to 5 minutes of beginning the vacuum [106]. Based on this study, the US Food and Drug Administration granted premarket approval of the device in August 2020 [107]. This device may become the preferred intervention for patients who do not respond to oxytocin alone, given that it is rapidly effective

and not associated with serious procedure-related adverse events. (See ["Postpartum hemorrhage: Medical and minimally invasive management"](#), section on 'Vacuum-induced uterine tamponade'.)

### **Caffeine consumption in pregnancy (September 2020)**

Individuals who are pregnant or attempting pregnancy are advised to limit caffeine consumption to less than 200 to 300 mg per day because consumption below this level generally has not been associated with adverse reproductive or developmental effects. Now, a narrative review of 37 observational studies found that caffeine consumption was associated with small increased risks for pregnancy loss (miscarriage), stillbirth, low birth weight, and small for gestational age infants that appeared to be dose-dependent, with no safe threshold level [108]. Given the limits of observational studies and inconsistencies across the available body of evidence, UpToDate continues to advise caution regarding caffeine intake during pregnancy and suggests individuals limit their caffeine intake to 200 to 300 mg per day. (See ["The effects of caffeine on reproductive outcomes in women"](#), section on 'Summary'.)

## What's new in **infectious diseases**

September 2020

### **HIV INFECTION**

#### **Fostemsavir for multidrug-resistant HIV (September 2020)**

[Fostemsavir](#), a novel attachment inhibitor, may be a useful additional option for patients with multidrug-resistant HIV infection who are failing antiretroviral therapy. In a study of nearly 400 such patients, a fostemsavir-containing regimen was associated with a viral load <40 copies/mL at 48 weeks in 54 percent of those patients whose regimen included at least one other active agent and in 38 percent of those whose regimen had no other fully active agent [62]. The decision to initiate fostemsavir should be made in consultation with a provider experienced in managing patients with drug-resistant HIV. (See ["Overview of antiretroviral agents used to treat HIV"](#), section on 'Attachment inhibitors'.)

## What's new in **palliative care**

September 2020

### **SYMPTOM MANAGEMENT**

#### **Exercise for insomnia in palliative care patients (September 2020)**

Insomnia is a common symptom among palliative care patients, which can be difficult to treat. In a meta-analysis of 27 trials conducted among cancer patients with sleep disturbance, both aerobic exercise and mind-body exercise (eg, yoga, qigong, tai chi) improved sleep outcomes when compared with a variety of active and inactive control interventions [2]. For patients who are well enough to engage in physical activity, an exercise intervention may provide benefit and avoid risks of additional pharmacotherapy. (See ["Overview of insomnia in palliative care"](#), section on 'Exercise'.)

# What's new in **pediatrics**

September 2020

## INFECTIOUS DISEASES AND IMMUNIZATIONS

### Updated indications for hepatitis A vaccination (September 2020)

The United States Advisory Committee on Immunization Practices (ACIP) released new guidelines for prevention of hepatitis A virus (HAV) infection in July 2020 [45]. These include a new recommendation to vaccinate individuals in settings that provide services to adults at increased risk for HAV infection (eg, substance use treatment or support centers, group homes, and nonresidential day care facilities for developmentally disabled persons). In addition, the guidelines recommend catch-up vaccination for all children and adolescents aged 2 to 18 years who have not previously received HAV vaccine. Vaccination of persons who receive blood products for clotting disorders (eg, hemophilia) is no longer recommended. We are in agreement with this guidance. (See "[Hepatitis A virus infection: Treatment and prevention](#)", section on 'Indications'.)

## PULMONOLOGY

### Watchful waiting versus adenotonsillectomy for obstructive sleep apnea in young children (September 2020)

Adenotonsillectomy is generally the first-line intervention for most children with severe obstructive sleep apnea (OSA) but evidence is limited regarding the best approach to lesser degrees of OSA. In a new randomized trial of 60 children 2 to <5 years with mild to moderate OSA, children undergoing adenotonsillectomy had significant improvements in quality-of-life compared with watchful waiting [64]. The subgroup of children with moderate OSA also had modest improvement in measures of apnea and hypopnea after adenotonsillectomy. Although interpretation is limited by the small sample size, these findings are similar to what has been previously described in older children and suggest that watchful waiting for six months is a reasonable option, but may increase the risk of persistent behavioral and nocturnal symptoms and impaired quality of life, especially for young children with moderate OSA. (See "[Management of obstructive sleep apnea in children](#)", section on 'Adenotonsillectomy'.)

# What's new in **sports medicine (primary care)**

September 2020

## PRIMARY CARE ORTHOPEDICS AND SPORTS MEDICINE

### Scaphoid fracture management (September 2020)

Scaphoid fractures are associated with high rates of non-union, and appropriate treatment remains a subject of debate. In the multi-center SWIFFT trial that randomly assigned 408 adults with acute bicortical fracture of the scaphoid waist to surgical fixation or cast immobilization, individuals with fractures that had  $\leq 2$  mm of displacement had similar wrist function at one year



regardless of treatment although grip strength was slightly better for patients in the surgery arm [96]. There was a non-significant trend towards a higher risk of malunion in casted patients. Cast immobilization appears to be a reasonable approach in adults with scaphoid fractures with minimal displacement. However, given the challenges presented by scaphoid fractures, we continue to have a low threshold for referring patients to a hand surgeon to discuss all treatment options. (See "[Scaphoid fractures](#)", section on 'Indications for surgical referral'.)

## What's new in **rheumatology**

September 2020

### OTHER RHEUMATOLOGY

#### **Updated guidelines for rheumatic disease care during COVID-19 (September 2020)**

The American College of Rheumatology (ACR) has updated its initial guidance for the care of adult patients with rheumatic diseases during the COVID-19 pandemic, including guidance for medication adjustments for those who are thought to be recently exposed to the SARS-CoV-2 virus or have documented or presumptive COVID-19 [14]. New recommendations for reinitiating treatment following COVID-19 have been added, with timing for treatment resumption based largely upon the severity and features of the infection, the time since exposure to the infection or symptom onset, and the rheumatic disease indications. Our approach is consistent with these guidelines. (See "[Coronavirus disease 2019 \(COVID-19\): Care of adult patients with systemic rheumatic disease](#)", section on 'Postinfection management/resumption of therapy'.)