



BREAKING NEWS

THE YEAR'S BEST CFP JOURNAL ARTICLES

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DR. SIMON MOORE MD CCFP FCFP

DR. PAUL DHILLON MB BCh CCFP (EM)

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Grants/Research Support: None
Speakers Bureau/Honoraria: None
Consulting Fees: The Review Course in Family Medicine
Patents: None
Other: None

DISCLOSURES

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This program has received financial support from The Review Course in Family Medicine in the form of an educational grant and literature review.

*Speakers have received **no funding from organizations** whose products or medications are being discussed in this program.*

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NEW GUIDELINES

TOP HEADLINES

COOKING & FOOD

POLITICS

SPORTS

KIDS NEWS

WEATHER

TRAVEL

TODAY'S SHOW

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***TOP ARTICLES IN
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NEW GUIDELINES

SPORTS

TOP HEADLINES

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WEATHER

POLITICS

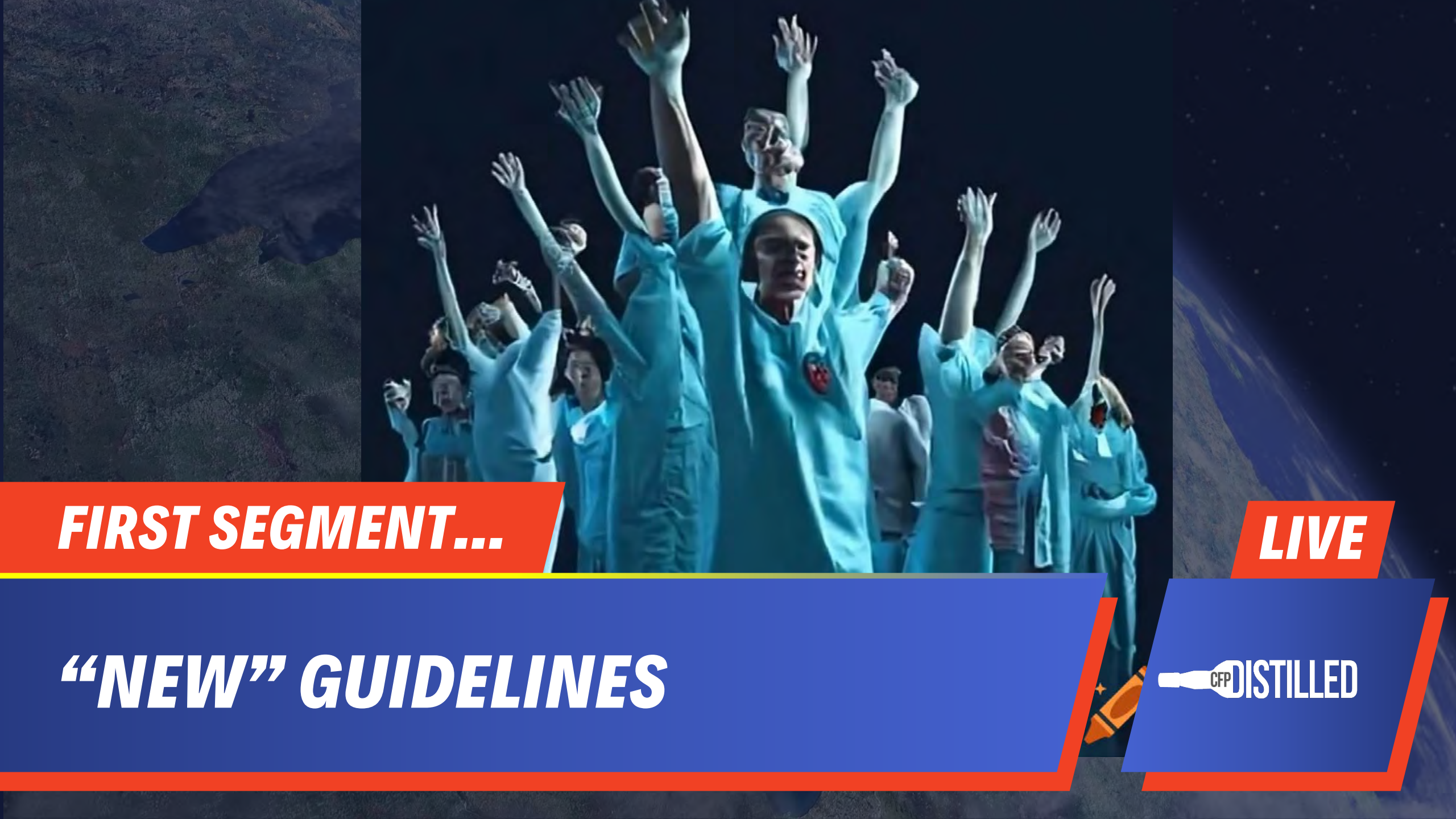
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FIRST SEGMENT...

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“NEW” GUIDELINES

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PEER simplified lipid guideline 2023 update

Prevention and management of cardiovascular disease in primary care

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Abstract

Objective To update the 2015 clinical practice guideline and provide a simplified approach to lipid management in the prevention of cardiovascular disease (CVD) for primary care.

Methods Following the Institute of Medicine's Clinical Practice Guidelines We Can Trust, a multidisciplinary, pan-Canadian guideline panel was formed. This panel was represented by primary care providers, free from conflicts of interest with industry, and included the patient perspective. A separate scientific evidence team performed evidence reviews on statins, ezetimibe, proprotein convertase subtilisin-kexin type 9 inhibitors, fibrates, bile acid sequestrants, niacin, and omega-3 supplements (docosahexaenoic acid with eicosapentaenoic acid [EPA] or EPA ethyl ester alone [icosapent]), as well as on 11 supplemental questions. Recommendations were finalized by the guideline panel through use of the Grading of Recommendations Assessment, Development and Evaluation methodology.

All recommendations are presented in a patient-centred manner designed with the needs of family physicians in mind. Many recommendations are similar to those published in 2015. Statins are recommended for primary prevention of secondary CVD prevention, and the Mediterranean diet and physical activity are recommended against secondary CVD prevention. The guideline panel recommended against omega-3 fatty acids (including EPA and DHA) for primary prevention when assessing cardiovascular risk, and recommended against omega-3 fatty acids (including EPA and DHA) for secondary prevention when to engage in informed decision-making with patients.

NEW GUIDELINE

2023 UPDATE
SIMPLIFIED LIPID GUIDELINE

LIVE



SAY NO TO...

- *Lipid targets*
- *Fasting*
- *Annual testing*
- *apoB and Lp[a]*
- *Coronary artery calcium scores*

**UNLIKE THE
CCS GUIDELINES**

NEW GUIDELINES

LIPIDS

LIVE

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FIRST SEGMENT...

“NEW” GUIDELINES

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Approach to atrial fibrillation

Essentials for primary care

Alan Bell MD CCFP FCFP Jason G. Andrade MD FRCPC FHRS Laurent Macle MD FRCPC FHRS
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Abstract

Objective To support family physicians in preventing atrial fibrillation (AF) in patients at risk and in identifying and managing those with established AF; and to summarize key recommendations for ideal screening and care of patients.

Sources of information The 2020 Canadian Cardiovascular Society and Canadian Heart Rhythm Society comprehensive guidelines for the management of AF, based on current evidence and clinical experience related to AF.

Main message Atrial fibrillation, which is estimated to affect at least 500,000 Canadians, is associated with high risks of stroke, heart failure, and death. Primary care clinicians occupy a central role in the management of this chronic condition, focusing on the challenges of preventing AF and identifying, diagnosing, treating, and following patients with AF. Evidence-based guidelines that provide optimal management strategies have been published by the Canadian Cardiovascular Society and Canadian Heart Rhythm Society to assist primary care physicians. Messages critical to primary care are offered to support effective management of AF, including ensuring patients are effectively managed in primary care.

Clinical Review

Editor's key points

- Family physicians provide essential preventive care and case identification by recognizing relevant risk factors and diagnosing patients with atrial fibrillation (AF).
- Clinical evaluation and classification of AF is necessary for family physicians to support shared decisions with patients to manage risk of stroke and systemic embolism with anticoagulation therapy.
- Specific treatments for rate and rhythm control can improve symptoms and complications, including heart failure, in patients with AF.
- Family physicians should be aware of special considerations such as comorbid coronary artery disease and perioperative concerns when managing patients with AF.

“NEW” GUIDELINE

LIVE

**ATRIAL FIBRILLATION
2020 CCS GUIDELINES**

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A. FIB ON 1 SLIDE

- *Catch it*
- *Cause?*
- *Clot risk?*
- *Control*

GOAL

- ↓ *Symptoms*
- ↑ *Quality of life*

NEW GUIDELINES

ATRIAL FIBRILLATION

LIVE

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CATCH IT: SCREEN

- *Check pulse in your patients*
- *0.9% detection rate*



NEW GUIDELINES

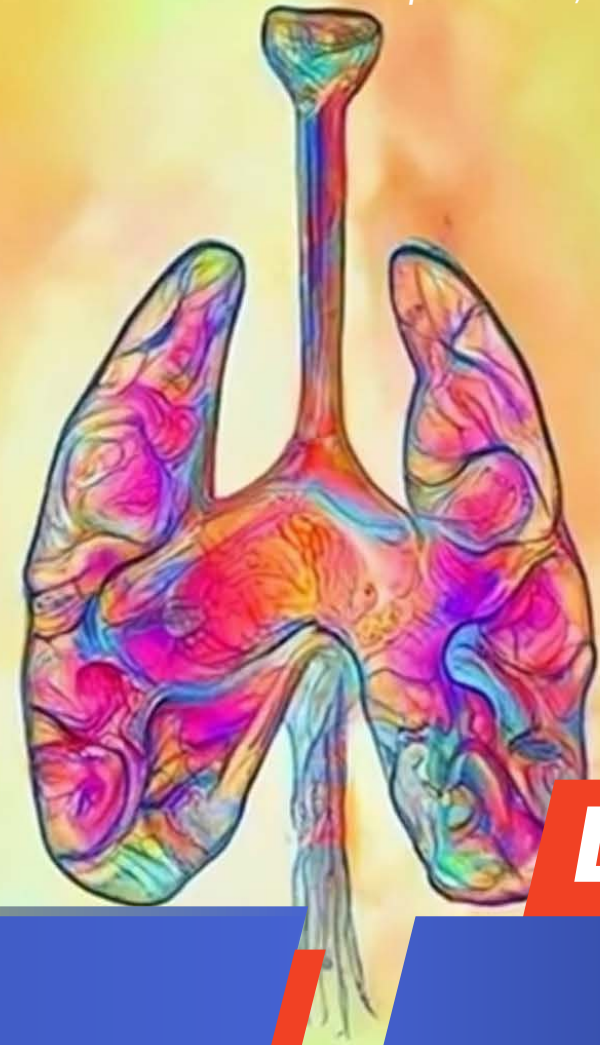
ATRIAL FIBRILLATION

LIVE

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CAUSE: MODIFIABLE?

- *CVD risks*
- *Thyroid disease*
- *Treat sleep apnea (↓ A. Fib risk)*



NEW GUIDELINES

ATRIAL FIBRILLATION

LIVE

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CLOT RISK

- *DOACs are now first-line*
- *NO Antiplatelet agents*
- *Use CHADS₂-65 (not CHADS₂-2)*

NEW GUIDELINES

ATRIAL FIBRILLATION

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CONTROL

- *Rate vs. Rhythm? Still no difference*
- *Early intervention: RHYTHM CONTROL*
 ↓ *Cardiac death / stroke*

NEW GUIDELINES

ATRIAL FIBRILLATION

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Prevention in Practice

Screening for primary prevention of fragility fractures

How much time does it take?

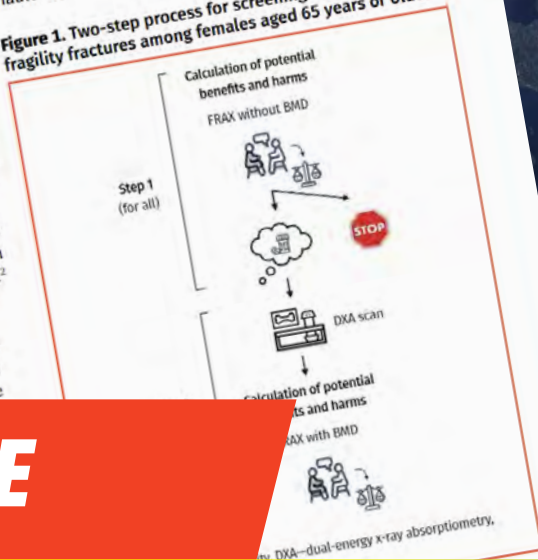
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Fractures are a frequent cause of morbidity in older people and some result from a minor impact that would not damage normal bone. These are called fragility fractures and typically involve the wrist, hip, spine, or shoulder. In 2019 to 2020 the annual rate of hip fracture among Canadians aged 65 to 79 years was 169 per 100,000; for those 80 years or older the rate was 1038 per 100,000.¹

In May 2023 the Canadian Task Force on Preventive Health Care (CTFPHC) published a new guideline on screening for primary prevention of fragility fractures.² It states:

... recommend "risk assessment-first" screening for fragility fractures in females aged 65 years or older.

Figure 1. Two-step process for screening to prevent fragility fractures among females aged 65 years or older



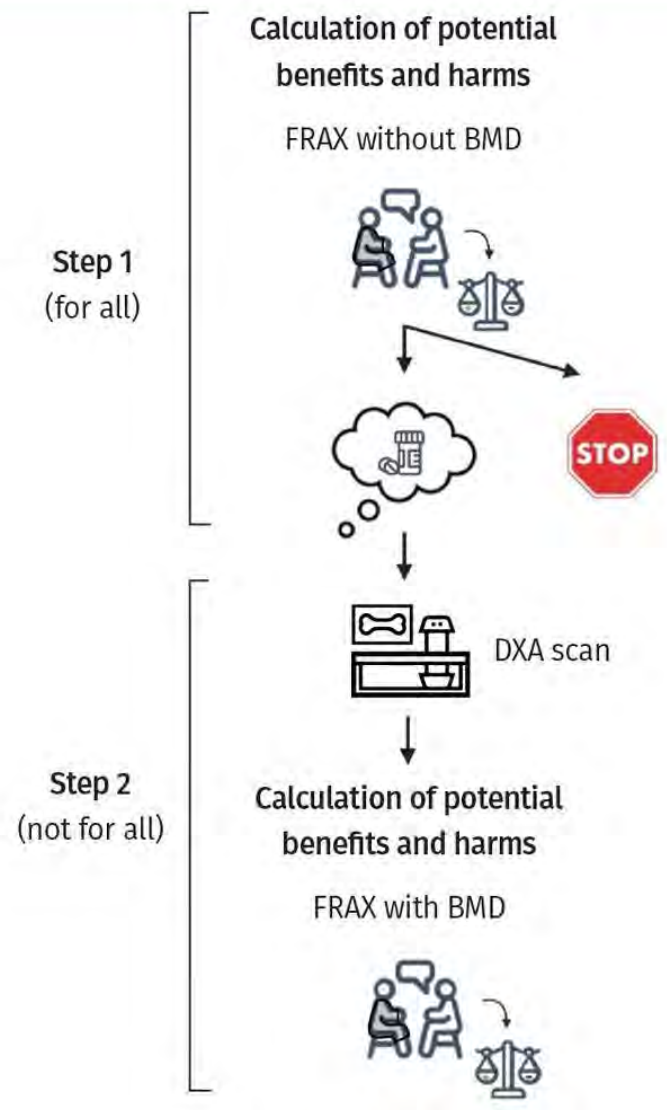
NEW GUIDELINE

LIVE

FRAGILITY FRACTURE PREVENTION 2023 CTFPHC GUIDELINES



... The CTFPHC recommends against...
... these CTFPHC recommendations should lead...
... making more effectively between patients and...



BMD—bone mineral density, DXA—dual-energy x-ray absorptiometry, FRAX—Fracture Risk Assessment Tool.³

NEW GUIDELINES

TOP HEADLINES

COOKING & FOOD

POLITICS

SPORTS

KIDS NEWS

WEATHER

TRAVEL

LIVE

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VACCINE FOR MI

KIDNEY TOOL

PARKINSONS

OUT WITH THE HRT

TECH TIP: GLUCOSE

NEXT UP IN...

TOP HEADLINES

LIVE

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VACCINE FOR MI

KIDNEY TOOL

PARKINSONS

OUT WITH THE HRT

TECH TIP: GLUCOSE

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Clinical Review

Top studies of 2022 relevant to primary care

From the PEER team

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Adrienne J. Lindblad PharmD ACPR Jessica Kirkwood MD CCFP(AM)
Jamie Falk BScPharm PharmD Jen Potter MD CCFP
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Abstract

Objective To summarize 10 high-quality medical articles published in 2022 that are relevant to primary care physicians.

Selecting the evidence Routine surveillance of tables of contents in relevant medical journals and EvidenceAlerts was conducted by the PEER (Patients, Experience, Evidence, Research) team, a group of primary care health care professionals with an interest in evidence-based medicine. Articles were selected and ranked based on relevance to practice.

Main message Published articles from 2022 most likely to influence primary care practice examined the following subjects: reducing dietary sodium for

Editor's key points

- Staying up to date on the vast amount of new literature relevant to primary care presents a considerable challenge. The authors of this review summarize what they believe were the top 10 studies (and 2 honourable mentions) of 2022 that could have meaningful effects on comprehensive family medicine practice.
- Studies relate to a variety of conditions and topics commonly encountered in primary care, including cardiovascular health, asthma, diabetes, weight loss, irritable bowel syndrome, constipation, and time required to provide primary care.
- Honourable mentions include a study of whether providing nonspeculum and self-sampling options increases uptake of cervical cancer screening and another examining medication nonadherence.

TOP HEADLINES

SAVE LIVES: FLU VACCINE AFTER MI

LIVE

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tables of
Journal of Medicine, the
ACCF/ACC, and the American College of
ACC/SCCS, and the American College of
relevant to primary care practice. Identifying
of primary care professionals. Owing to
we searched publica-
time

VACCINATE WITHIN 72 HRS

- *Reduces death from 4.9% to 2.9%*
- *NNT = 52 vs. placebo*
- *RCT, double-blind, n=2352*

TOP HEADLINES

**SAVE LIVES:
FLU VACCINE AFTER MI**

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VACCINE FOR MI

KIDNEY TOOL

PARKINSONS

OUT WITH THE HRT

TECH TIP: GLUCOSE

NEXT UP IN...

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Approach to chronic kidney disease in the elderly

Elbert Chow MD FRCPC Asad Ali Merchant MD FRCPC MScCh Frank Molnar MSc MDCM FRCPC Chris Frank MD CCFP(COE)(PC) FCFP

Clinical question

How can I improve outcomes for older adults with chronic kidney disease (CKD)?

Bottom line

Chronic kidney disease is associated with substantial morbidity and health care costs.¹ Strategies and tools to predict and delay progression to end-stage kidney disease (ESKD) are vital, especially for patients with clinical frailty or with comorbidities. For a more comprehensive summary on this topic, see the in-depth article published in the *Canadian Geriatrics Society Journal of CME*.²

Evidence

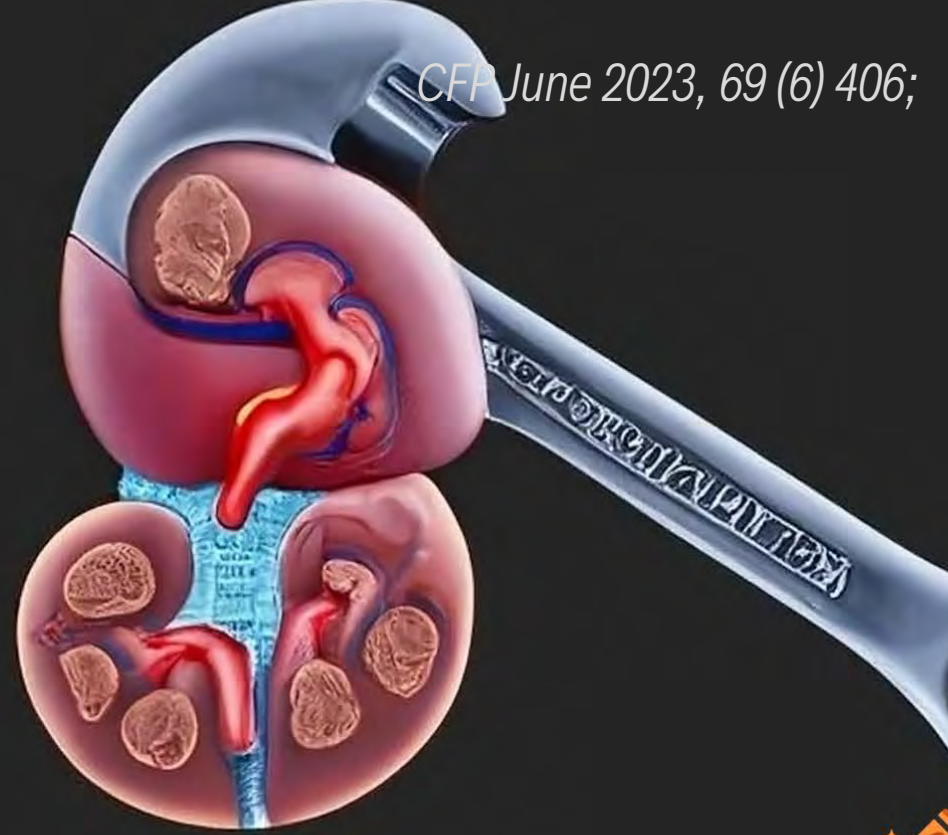
- There is physiologic decline in estimated glomerular filtration rate (eGFR) starting in one's third and fourth decades, with a loss of approximately 8 mL/min every subsequent decade.³
- A hallmark of normal age-related renal decline is the relative absence of proteinuria,⁴ which is associated with a better prognosis.⁵
- Hypertension, hyperglycemia, atherosclerotic disease, smoking, and hyperlipidemia are associated with accelerated renal decline.^{6,7}

blood pressure in older patients is postural hypotension,¹⁵ which can lead to falls and trauma. Similarly, glycemic control needs to be individualized. Canadian guidelines recommend that hemoglobin A_{1c} targets should depend on frailty or cognition, with a focus on avoiding extremes in blood glucose levels.^{16,17}

The effect of lipid management is attenuated in those older than 85 years.¹⁸ Lowering statin doses should be considered in elderly people with CKD, and patients should be monitored for myopathy.¹⁹ It may be prudent to defer statin therapy in patients who are frail with poor nutrition and risk of sarcopenia.¹⁸

Other management. Anemia is common in CKD and is often related to relative erythropoietin deficiency.²⁰ Symptoms may be magnified in elderly patients and impact quality of life. Anemia with CKD is associated with increased cardiovascular events, hospitalizations, transfusions, and death.²¹ Although ferritin levels are often elevated in CKD patients, iron deficiency is still possible: KDIGO recommends a trial of intravenous iron for patients with transferrin saturation of less than 30% and ferritin levels of less than 500 µg/L despite oral supplementation.²² According to Canadian Society of Nephrology guidelines, an erythropoietin-stimulating agent should be initiated when the hemoglobin level is between 90 and 100 g/L, with a target range of 100 to 110 g/L.²³ Dosing and monitoring should be managed by nephrologists.

...risk of fragility fractures in patients can be difficult. Some recommend... As CKD pro... hydroxyvitamin D to... and supplementation... More information on... management can be found... website.²⁷



TOP HEADLINES

LIVE

KFRE: THE KIDNEY TOOL

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KIDNEY FAILURE RISK CALCULATION

If you don't have the information required below talk to your doctor.

Age (Yrs)

Sex

Select ▾

Region

Select ▾

GFR (ML/Min/1.73M2)

 ?

Urine Albumin: Creatinine Ratio Units

 ?

Select ▾

NEXT

VACCINE FOR MI

KIDNEY TOOL

PARKINSONS

OUT WITH THE HRT

TECH TIP: GLUCOSE

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Parkinson disease primer, part 1: diagnosis

Chris Frank MD CCFP(COE) FCFP Ruth Chiu MD CCFP(COE) Joyce Lee MD CCFP(COE)

Abstract

Objective To provide family physicians an updated approach to the diagnosis of Parkinson disease (PD).

Sources of information Published guidelines on the diagnosis and management of PD were reviewed. Database searches were conducted to retrieve relevant research articles published between 2011 and 2021. Evidence levels ranged from I to III.

Main message Diagnosis of PD is predominantly clinical. Family physicians should evaluate patients for specific features of parkinsonism, then determine whether symptoms are attributable to PD. Levodopa trials can be used to help confirm the diagnosis and alleviate motor symptoms of PD. "Red flag" features and absence of response to levodopa may point to other causes of parkinsonism and prompt more urgent referral.

Conclusion Access to neurologists and specialized clinics varies, and Canadian family physicians can be important players in facilitating early and accurate diagnosis of PD. Applying an organized approach to diagnosis and considering motor and nonmotor symptoms can greatly benefit patients with PD. Part 2 in this series will review management of PD.

Parkinson disease (PD) is the fastest growing neurodegenerative condition, with prevalence predicted to double from more than 6 million globally in 2015 to more than 12 million by 2040.¹ Recognizing parkinsonism and having knowledge of the presentation, diagnosis, and management of motor and nonmotor symptoms of PD are increasingly important. Access to neurologists and specialized clinics is limited in many areas. Family physicians are well placed to identify symptoms and refer patients with specialty clinics in management.

Editor's key points

• Parkinson disease (PD) should be considered in any patient presenting with parkinsonism, balance problems, gait changes, or nonmotor symptoms common in PD.

• Diagnosis of PD is mainly clinical, and routine use of imaging is not recommended. While motor symptoms are the core diagnostic features of PD, nonmotor symptoms are increasingly recognized as being important in the diagnosis of PD and management of patients with PD.

• Short-term levodopa challenges are not recommended for diagnosis of PD, but a long-term trial of dopaminergic treatment with clear and marked response can help confirm diagnosis.

• Family physicians should be aware of causes of parkinsonism other than PD to allow for further investigation and timely workup for other possible conditions.

Editor's key points

• Parkinson disease (PD) presents a challenging array of motor and nonmotor symptoms that requires collaboration between family physicians, PD specialists, and allied health professionals.

• Levodopa is the most effective medication for the treatment of motor symptoms in patients with PD. A trial of levodopa may be considered while awaiting assessment by other specialists.

• Although common, nonmotor symptoms are often underrecognized and undertreated in patients with PD. This can negatively affect patients' function and quality of life, and it can increase hospitalization risk and caregiver burden.

Parkinson disease primer, part 2: management of motor and nonmotor symptoms

Chris Frank MD CCFP(COE) FCFP Ruth Chiu MD CCFP(COE) Joyce Lee MD CCFP(COE)

Family physicians with an approach to the management of symptoms of Parkinson disease (PD).

Published guidelines on the management of PD were conducted to retrieve relevant research articles published between 2011 and 2021. Evidence levels ranged from I to III.

Family physicians can play an important role in identifying and managing symptoms of PD. Family physicians should initiate treatment if they affect function and if specialist referral is needed. Basic titration approaches should be used for motor symptoms. Abrupt withdrawal of levodopa can lead to severe symptoms. Nonmotor symptoms are common and can affect disability, quality of life, and risk of falls. Family physicians can manage orthostatic hypotension and constipation. Psychiatric symptoms such as depression, anxiety, and psychosis can be treated. Occupational therapy, speech therapy, and cognitive behavioral therapy are recommended to help preserve function.

Complex combinations of motor and nonmotor symptoms should have basic knowledge of Parkinson disease. Family physicians can play an important role in identifying and managing symptoms and particularly nonmotor symptoms. This can improve patients' quality of life. An organized approach to diagnosis and management is recommended to help preserve function.

Family physicians can play an important role in the management of symptoms and nonmotor symptoms. A need to diagnose PD and manage symptoms is highlighted. Longed wait times for specialist services are a challenge.

TOP HEADLINES

PARKINSON PRIMERS

LIVE

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DIAGNOSIS

1. *Find Parkinsonism (Slow, shaky, stiff)*
2. *Find out cause: Parkinson disease or other?*

TOP HEADLINES

PARKINSON PRIMERS

LIVE

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WHEN TO REFER

- Falls, vertical gaze palsy – Progressive supranuclear palsy?
- History of stroke – Vascular?
- Antipsychotic use – Medication-induced?
- Early personality change – Tauopathy (e.g. Alzheimer's)?

TOP HEADLINES

PARKINSON PRIMERS

LIVE

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START LEVODOPA & REFER

- *Delay worsens disability*
- *Titrate upwards over 4 weeks*
- *Watch for side effects: nausea, orthostasis, confusion*

TOP HEADLINES

PARKINSON PRIMERS

LIVE

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TREAT NON-TREMOR SYMPTOMS

- *Biggest effect on QOL*
- *Constipation, orthostasis, sleep, mood...*
- *Sialorrhea in 70% – Botox, speech language pathology*

TOP HEADLINES

PARKINSON PRIMERS

LIVE

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VACCINE FOR MI

KIDNEY TOOL

PARKINSONS

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TECH TIP: GLUCOSE

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Praxis

Rapid recommendations Updates from 2021 guidelines: part 2

Danielle O'Toole MD MSc CCFP

This is the final article in a 2-part series summarizing updates from clinical practice guidelines published in 2021 that are relevant to primary care in Canada. Having an easily accessible summary of key updated guidelines can help physicians adopt relevant changes in standards of care. This article allows family doctors to continue to build on their knowledge or address potential gaps. As with all literature, it is essential to consider the level of supporting evidence and reflect on recommendations using a primary care lens before integrating them in patient care.

Guideline updates

The Canadian Task Force on Preventive Health Care recommends screening of sexually active individuals younger than 30 years for chlamydia and gonorrhoea annually at primary care visits, as feasible (conditional recommendation, very low-certainty evidence). The Canadian Task Force on Preventive Health Care reports that rates of chlamydia and gonorrhoea have been increasing annually since 2000, with the highest rates found in persons between 15 and 29 years of age. Symptoms include cervicitis, epididymitis, pelvic pain, and infertility.

examination at 11 to 14 weeks' gestation (strong recommendation, high level of evidence) and that for asymptomatic women this examination should replace, rather than complement, an early first-trimester sonographic examination (conditional recommendation, moderate level of evidence). Many international guidelines recommend the use of sonography for pregnancy dating. The ultrasound scan at 11 to 14 weeks can be used to assess viability, establish gestational age, detect fetal anomalies, and screen for signs of aneuploidies, adnexal abnormalities, and risk factors. In addition, there might be a role for uterine artery Doppler ultrasonography in screening for preeclampsia and uteroplacental vascular insufficiency. For pregnancy dating, use the earliest examination after 7 weeks' gestation or after the crown-rump length is greater than 10 mm. Replacing the early first-trimester ultrasound scan with an ultrasound scan at 11 to 14 weeks does risk inaccuracies in dates when ordering enhanced first-trimester screening.

The SOGC has added tissue-selective estrogen complex (TSEC) and tibolone (a synthetic steroid) as treatment options for women with postmenopausal vasomotor symptoms (high level of evidence). Women without a uterus can take continuous estrogen therapy, while women with a uterus typically need both estrogen and progestin. Management of postmenopausal vasomotor symptoms with TSEC and tibolone offer a nonhormonal alternative to estrogen therapy. Tibolone provides partial protection up to 2 years after menopause in the treatment of vasomotor symptoms. There is an increased risk of thromboembolism with additional treatment.

TOP HEADLINES

LIVE

SOGC ON MENOPAUSE, HYPOACTIVE SEXUAL DESIRE



NEW GSM* TREATMENTS

- *First line: moisturizers, lubricants*
- *Second line: vaginal estrogen (even in some breast cancer patients), prasterone, and ospemifene*

*Formerly atrophic vaginitis, now *genitourinary syndrome of menopause*

TOP HEADLINES

SOGC ON MENOPAUSE

LIVE

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NEW HSDD* TREATMENTS

- *Educate: menopause, aging, foreplay, and nonpenetrative alternatives*
- *Premenopause: Flibanserin*
- *Post–menopause: Flibanserin or testosterone patches (off–label)*

Strong recommendation, moderate level of evidence

TOP HEADLINES

**SOGC ON *HYPOACTIVE SEXUAL
DESIRE DISORDER**

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TECH TIP: GLUCOSE

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Tools for Practice

Continuous glucose monitoring in diabetes

Samantha S. Moe PharmD ACPR Michael R. Kolber MD CCFP MSC FCFP Jamie Falk PharmD

Clinical question

Compared with self-monitoring blood glucose (SMBG), does continuous glucose monitoring improve clinical outcomes or hemoglobin A_{1c} (HbA_{1c}) levels for adults with diabetes taking insulin?

Bottom line

Continuous glucose monitors use subcutaneous sensors and include real-time monitors (RTMs) and flash monitors (FMs). In patients with type 1 diabetes, RTM use is associated with lower rates of severe hypoglycemic events (6%) compared with SMBG use (8%), with no reported events in those with type 2 diabetes. Compared with SMBG, FMs do not differ regarding rates of severe hypoglycemic events, and effects on HbA_{1c} are inconsistent (type 1) or similar (type 2). Cost may limit use.

Evidence

Results were statistically different unless indicated. A minimal clinically important HbA_{1c} change was defined as 0.5%.¹

- Type 1 diabetes, RTMs vs SMBG (8 systematic reviews, 11 to 22 RCTs; 1399 to 2461 patients): At 4 to 12 months, the percentage of severe hypoglycemia requiring third-party assistance (3 systematic reviews) was 6% to 10% lower with RTMs compared with SMBG.

- Limitations: Most RCTs were unblinded and industry funded. Quality-of-life scores were inconsistently reported.

Context

- Real-time monitors automatically display readings (eg, Dexcom 6) whereas FMs require manual upload (eg, FreeStyle Libre). Replace sensors every 7 to 14 days.²
- Cost per year: approximately \$2500 to \$6000 vs \$1200 for 4-times daily SMBG.³

Implementation

New diabetes guidelines emphasize the use of medications with proven cardiorenal benefit in patients at high risk, with glycemic control a secondary focus.¹⁰ Exercise, healthy dietary choices, and medication adherence should continue to be encouraged. Advising non-insulin dependent patients to check glucose readings frequently is likely unnecessary. Continuous glucose monitor readings may lag behind SMBG by up to 15 minutes, particularly after exercising or eating.¹¹

Dr Samantha S. Moe is Clinical Evidence Expert at the College of Family Physicians of Canada. Dr Michael R. Kolber is Professor in the Department of Family Medicine at the University of Alberta in Edmonton. Dr Jamie Falk is a pharmacist and Associate Professor in the College of Pharmacy at the University of Manitoba in Winnipeg.

Competing interests

Name declared

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TOP HEADLINES

LIVE

CONTINUOUS GLUCOSE MONITOR



Type 1

- Severe hypoglycemia: 6% with real-time monitoring (vs 8% with self-monitoring)
- A1c: similar

Type 2

- Hypoglycemia: No difference
- A1c: No difference

TOP HEADLINES

CONTINUOUS GLUCOSE MONITOR

LIVE

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NEW GUIDELINES

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COOKING & FOOD

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KIDS NEWS

WEATHER

TRAVEL

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NEXT SEGMENT...

LIVE

THE CFP: DISTILLED KITCHEN



PYOGENIC SALT

MALNOURISHMENT

Ω 3

CONTRACEPTION

NEW INGREDIENT

NEXT UP IN...

COOKING

LIVE

 **DISTILLED**

PYOGENIC SALT

MALNOURISHMENT

Ω 3

CONTRACEPTION

NEW INGREDIENT

NEXT UP IN...

COOKING

LIVE

 **DISTILLED**

Simple, safe, and effective treatment for pyogenic granuloma

Edward S. Weiss MD CCFP DipDerm Dominic Wood BSc

Praxis

Pyogenic granuloma (PG) is a relatively common cutaneous condition often seen by family physicians. Patients frequently seek treatment for PG owing to the friable nature of the lesion and resultant nuisance bleeding from minor trauma. It is generally easy to diagnose, as the clinical appearance is fairly typical: a fleshy, ulcerated, reddish papule that grows quickly over the course of weeks to months.¹ Pyogenic granuloma has numerous treatment options, including surgical excision, curettage and electrocautery, and vascular laser. Although risk of recurrence is not insubstantial,¹ the differential diagnosis for a lesion resembling PG includes rare cases of amelanotic melanoma, and for this reason it is sometimes recommended that ablative treatments (eg, cryotherapy) be avoided—unless the lesion can be demonstrated to be benign by histologic examination.

Busy clinicians may wish to have a simple method for correctly diagnosing and treating benign PG. Thankfully, there is a quick and easy way to do so, using the most common of household ingredients: table salt. Long recognized for its utility in treating umbilical granuloma, salt application has also been shown to be safe, effective, and well-tolerated for treatment of PG.² It is believed that salt acts as a desiccant, causing shrinkage of the small vessels feeding the PG. An amelanotic melanoma is suspected to regress substantially in

Figure 1A. Step 1 in creating a makeshift salt reservoir to treat pyogenic granuloma: Prepare a piece of tape with a medial slit.



Figure 1B. Step 2 in creating a makeshift salt reservoir to treat pyogenic granuloma: Allow the edges of the slit to overlap slightly, creating a reservoir for table salt.



COOKING

LIVE

SALTY TREATMENT FOR PYOGENIC GRANULOMA

CFP **DISTILLED**



PYOGENIC SALT

MALNOURISHMENT

Ω 3

CONTRACEPTION

NEW INGREDIENT

NEXT UP IN...

COOKING

LIVE

 **DISTILLED**

Malnourishment masquerading as dementia

Inadequate social support associated with cognitive impairment

Kwame Agyei BSc Donald F. Weaver MD PhD FRCPC

Adequate nutrition is crucial to cognition. Recognized as a global health concern by the World Health Organization,¹ malnutrition refers to an imbalanced intake of energy or nutrients and includes these categories: being overweight—which is a risk factor for hypercholesterolemia, stroke, and diabetes mellitus, all of which could lead to cognitive impairment²; being underweight, a state in which inadequate intake of nutrients and micronutrients can cause cognitive decline²; and being of normal weight but not consuming adequate levels of necessary nutrients and micronutrients,¹ which is an understudied potential contributor to cognitive dysfunction. Most malnourishment studies focus on nutrient excesses and deficiencies with little emphasis on the socioeconomic factors that influence associated patient behaviour.

Alzheimer disease and related dementias are common: an estimated 564,000 Canadians are currently living with dementia; 76,000 Canadians are diagnosed with dementia annually; and 1 in 5 Canadians care for someone living with dementia.^{3,4} Although malnutrition can masquerade as dementia, recognizing malnourishment can be challenging.⁶ Older adults presenting to family physicians may hide their inability to prepare nutritious meals owing to their independence. Given recent trends in the grocery industry (e.g., drive-thru checkouts, urban relocation of stores), physicians should be alert to malnourishment when assessing cognitive impairment.

Case Report

Editor's key points

- ▶ When assessing patients with cognitive decline, every effort should be made to rule out other factors before diagnosing them with dementia.
- ▶ Normal weight malnutrition is a possible reversible factor contributing to cognitive decline.
- ▶ Elderly individuals may conceal food acquisition difficulties out of fear that the perceived loss of independence could result in being forced out of their homes and into long-term care homes.
- ▶ Changes in grocery store design and services often present intimidating challenges for older people and may contribute to malnutrition.

Points de repère du rédacteur

- ▶ Lors de l'évaluation de patients ayant un déclin cognitif, tous les efforts doivent être déployés pour exclure d'autres facteurs possibles avant de poser un diagnostic de démence.
- ▶ Une malnutrition malgré un poids normal peut être un facteur susceptible de contribuer au déclin cognitif.
- ▶ Les personnes plus âgées peuvent avoir des problèmes d'alimentation en raison de la peur que la perte d'autonomie puisse faire en sorte qu'elles soient forcées de quitter leur domicile pour être



COOKING

LIVE

MALNOURISHMENT MASQUERADE

 **DISTILLED**

CASE REPORT

- 92 F with dementia MMSE 24/30
- 3 months after moving to long-term care, MMSE = 29/30
- Her diet had been cookies, chips, tea



**DEMENTIA OR
MALNOURISHMENT?**

LIVE

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PYOGENIC SALT

MALNOURISHMENT

Ω 3

CONTRACEPTION

NEW INGREDIENT

NEXT UP IN...

COOKING

LIVE

 **DISTILLED**

Clinical Review

Indications for omega-3 fatty acid supplementation in prevention of cardiovascular disease

From fish to pharmaceuticals

N. John Bosomworth MD CCFP FCFP

Abstract

Objective To explore the evidence for omega-3 fatty acid (O3FA) supplementation in primary and secondary prevention of cardiovascular disease (CVD).

Sources of information PubMed, Cochrane reviews, and Google Scholar were searched for meta-analyses and reviews related to O3FAs and CVD. Salient, recent randomized controlled trials referenced in these reviews were retrieved. Current lipid guidelines were reviewed.

Main message Most O3FAs are derived from marine or aquatic microalgae, which are consumed by fish. The essential fatty acids eicosapentaenoic acid and docosahexaenoic acid are mainly sourced from fish, with a small fraction of these fatty acids modestly lower triglyceride levels, but the mechanisms related to these effects are unclear.

Editor's key points

- ▶ In considering cardiovascular disease (CVD) prevention by omega-3 fatty acids, all guidelines continue to recommend at least 2 servings of oily fish per week, although benefit is probably seen only in secondary prevention. Fish oil and combination eicosapentaenoic acid and docosahexaenoic acid preparations have failed to show benefit at any dose at any level of prevention in patients who are appropriately prescribed statins.
- ▶ Eicosapentaenoic acid alone reduces residual risk in patients taking statins. High-dose eicosapentaenoic acid yields substantial benefit for patients with triglyceride levels between 1.5 and 5.6 mmol/L taking an appropriate statin at the appropriate dose who have CVD (secondary prevention), or who have diabetes and 1 or more additional CVD risk factors (primary prevention).
- ▶ There is a substantial relative reduction in atrial fibrillation with use of high-dose omega-3 fatty acids, but the absolute increase is small. No increase in harm is found at doses of 3 g per day.

COOKING

LIVE

Ω 3 INDICATIONS

CFP DISTILLED



... acid shows substantial... high triglyceride levels. ... first evolved as hunter-gatherers and... million years ago. In compar... mono- and...

CARDIOVASCULAR BENEFIT?

- *Evidence only supports secondary prevention*
- *No benefit over statin*
- *Guidelines: eat 2 servings oily fish / week*

Ω 3 INDICATIONS



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PYOGENIC SALT

MALNOURISHMENT

Ω 3

CONTRACEPTION

NEW INGREDIENT

NEXT UP IN...

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LIVE

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Tools for Practice

Etonogestrel implant effectiveness

Nicolas Dugr  PharmD MSc BCACP Nidhi Choksi BScPharm Jessica Kirkwood MD CCFP(AM)

Clinical question

How does the etonogestrel implant (Nexplanon) compare with other long-acting reversible contraception?

Bottom line

The etonogestrel implant is effective, with 0 to 0.34 pregnancies per 100 women per year. In 1 RCT, the implant had a higher discontinuation rate (27% vs 20%), more amenorrhea (29% vs 9%), and lower patient satisfaction (66% vs 80%) compared with a low-dose levonorgestrel intrauterine device (IUD).

Evidence

No statistical analysis unless mentioned.
• In 1 systematic review (51 studies),¹ only 1 RCT (766 women) compared a 68-mg etonogestrel implant with a 13.5-mg levonorgestrel IUD (Jaydess) over 12 months.²
-The RCT found the following: the number of pregnancies was 0 versus 3 (IUD); discontinuation was 27% versus 20% (IUD) (statistically different), mostly owing to adverse events (eg, increased bleeding 11% versus 5% (IUD)); patient satisfaction was 66% versus 80% (IUD) (statistically different).

Context

- The etonogestrel implant is a subcutaneous, radiopaque, matchstick-sized flexible rod that lasts 3 years.^{7,8} It costs roughly \$310 versus \$370 for hormonal IUDs, which last 5 years.⁷
- Training is required for insertion and removal.⁸
- Cases of pulmonary migration, infections, barium allergic reactions, and insertion-related neuropathies have been reported.⁹ No effect has been observed on bone mineral density.^{10,11}

Implementation

The most common reported adverse effect during etonogestrel implant insertion is "pins and needles/numbness" in the insertion limb, and it is more common among repeat users than new users (10 of 1000 repeat insertions vs 1.2 of 1000 new users).⁶ The implant can be inserted at any time, but backup contraception should be used for 7 days after insertion if not inserted between day 1 and 5 of the menstrual cycle.⁸ Efficacy and safety data are limited in women with obesity or irregular bleeding patterns as most studies excluded them.³⁻⁵

Dr Nicolas Dugr  is a pharmacist at the CIUSSS du Nord-de-l' le-de-Montreal and Clinical Associate Professor in the Faculty of Pharmacy at the University of Montreal in Quebec. Nidhi Choksi is Pharmacy Manager at the North West Company in Halifax, NS. Dr Jessica Kirkwood is a family physician and Assistant Professor in the Department of Family Medicine at the University of Alberta in Edmonton.

Competing interests

Declared

COOKING

LIVE

CONTRACEPTIVE IMPLANT



• Similar efficacy...
...were found in observational...
...are adapted from peer-reviewed articles at <http://www.ncbi.nlm.nih.gov/pubmed/201220753388>.
...Diienne J. Lindblad, articles are developed by the Patients...
...at Saskatchewan Chapters. Feedback is welcome at feedback@cpd.ca.

IMPLANT (\$310) vs. LOW-DOSE IUS (\$370)

- *More discontinuation (27 vs 20%)*
- *More amenorrhea (29% vs 9%)*
- *Less patient satisfaction (66% vs 80%)*

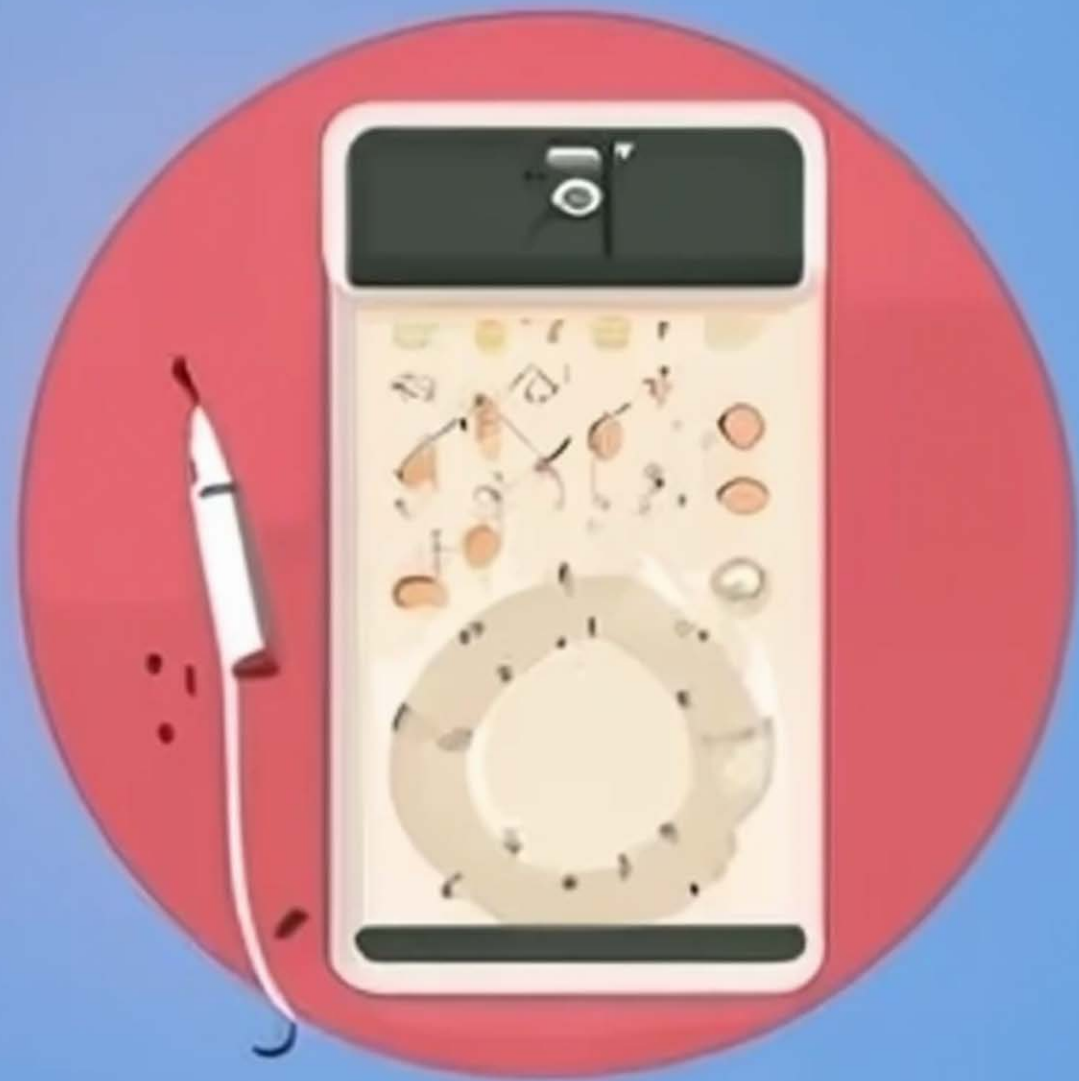


LIVE



PROS AND CON(TRACEPTION)S

 **DISTILLED**



PYOGENIC SALT

MALNOURISHMENT

Ω 3

CONTRACEPTION

NEW INGREDIENT

NEXT UP IN...

COOKING

LIVE

 **DISTILLED**

Clinical Review

Top studies of 2022 relevant to primary care

From the PEER team

Danielle Perry RN MSc Samantha S. Moe PharmD ACPR Betsy Thomas BScPharm
Adrienne J. Lindblad PharmD ACPR Jessica Kirkwood MD CCFP(AM)
Jamie Falk BScPharm PharmD Jen Potter MD CCFP
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Main message Published articles from 2022 most likely to influence primary care practice examined the following subjects: reducing dietary sodium for

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- Staying up to date on the vast amount of new literature relevant to primary care presents a considerable challenge. The authors of this review summarize what they believe were the top 10 studies (and 2 honourable mentions) of 2022 that could have meaningful effects on comprehensive family medicine practice.
- Studies relate to a variety of conditions and topics commonly encountered in primary care, including cardiovascular health, asthma, diabetes, weight loss, irritable bowel syndrome, constipation, and time required to provide primary care.
- Honourable mentions include a study of whether providing nonspeculum and self-sampling options increases uptake of cervical cancer screening and another examining medication nonadherence.



COOKING

LIVE

NEW INGREDIENT FOR WEIGHT LOSS

 **DISTILLED**

tables of
Journal of Medicine, the
ACCPSSS,² and the American College of
relevant to primary care practice. Identifying
of primary care professionals. Owing to
we searched publica-
1-1-time

- *Previously for Type 2 Diabetes glycemic control*
- *Up to 20% of body weight loss in trial for obesity*
 - Semaglutide: ~16%, Liraglutide: ~6%*
- *Side effects: nausea*

Double-blind RCT, n=2539

***TIRZEPATIDE: FIRST-IN-CLASS
“TWINCRETIN”***

LIVE

 **DISTILLED**

NEW GUIDELINES

TOP HEADLINES

COOKING & FOOD

POLITICS

SPORTS

KIDS NEWS

WEATHER

TRAVEL

LIVE

 **DISTILLED**



NEXT SEGMENT...

LIVE

CFP: DISTILLED POLITICAL NEWS

 **DISTILLED**

COUGH

ANAL FISSURES

DIVERTICULITIS

PRUNE JUICE

NEXT UP IN...

POLITICS

LIVE

 **DISTILLED**

COUGH

ANAL FISSURES

DIVERTICULITIS

PRUNE JUICE

NEXT UP IN.....

POLITICS

LIVE

 **DISTILLED**

Tools for Practice

Bronchodilators or inhaled corticosteroids for postinfectious cough

Samantha S. Moe PharmD ACPR Emélie Braschi MD PhD CCFP G. Michael Allan MD CCFP FCFP

Clinical question

Do bronchodilators or inhaled corticosteroids (ICS) help postinfectious cough (PIC) in adults without asthma?

Bottom line

Data are limited, with results from only 2 ICS RCTs and 1 bronchodilator RCT. In adults, PIC scores may improve about 50% when taking placebo and about 5% to 10% more with ICS over 2 weeks. Ipratropium-salbutamol may resolve cough in more patients than will placebo at day 10 (37% vs 69% have ongoing cough) but most patients (>80%, regardless of treatment) will have cough resolution by day 20.

Evidence

Differences were statistically significant unless indicated.
• For ICS versus placebo: In 4 systematic reviews of treatments for persistent cough (4 to 9 RCTs, 335 to 750 patients) interpretation of results was limited by inclusion of RCTs with acute (<3 weeks)^{1,2} and chronic (>8 weeks)^{2,3} cough, and multiple drug classes.⁴
• The most useful systematic review² (2 RCTs, 163 patients) found a mean difference of 0.42 (95% CI 0.15 to 0.69) in favour of ICS over placebo for cough resolution at 8 weeks.

Context

- Postinfectious cough persists 3 to 8 weeks after an acute respiratory illness.⁷
- In an RCT⁸ of beclomethasone versus placebo, it is likely that patients did not have true PIC (subacute). Yet, ICS improved 3 of 6 outcomes on device-measured cough (no difference in patient-reported symptoms).
- Guidelines suggest considering a trial of inhaled ipratropium or, if refractory, ICS.⁹
- The RCTs did not include patients with COVID-19.

Implementation

Upper airway cough syndrome (ie, postnasal drip) can cause PIC. If suspected, intranasal steroids can be tried. Other causes of subacute cough include exacerbation of asthma or chronic obstructive pulmonary disease, gastroesophageal reflux disease, and medications.⁷ Red flags are hemoptysis, smoking, prominent dyspnea, hoarseness, systemic symptoms, dysphagia, recurrent pneumonia, and abnormal physical examination findings.⁷ Tuberculosis should be considered in high-risk populations.⁷ Follow-up via a telephone call or an in-person appointment should occur 4 to 6 weeks after the initial evaluation to ensure cough resolution.⁷

Dr Samantha S. Moe is Clinical Evidence Expert at the College of Family Physicians of Canada (CFPC). Dr Emélie Braschi is a hospitalist at the Elisabeth Brzyrre Hospital in Ottawa, Ont, and a physician at the CFPC. Dr G. Michael Allan is Director of Programs and Practice Support at the CFPC.

POLITICS

LIVE

PUFFER FOR POSTVIRAL COUGH



STERIOD OR BRONCHODILATOR?

- *Ipratropium–salbutamol: More cough resolved at day 10 (37% vs. 69% with placebo)*
- *ICS: More cough score improvement at day 14 (40–45% vs. 50% with placebo)*

POSTVIRAL COUGH

LIVE

 **DISTILLED**

COUGH

ANAL FISSURES

DIVERTICULITIS

PRUNE JUICE

NEXT UP IN...

POLITICS

LIVE

 **DISTILLED**

Tools for Practice

Topical treatments for anal fissure

Callie Fagan BSP Michael R. Kolber MD CCFP MSc Adrienne J. Lindblad BSP PharmD ACPR

Clinical question

How effective are topical treatments (calcium channel blockers [CCBs], nitrates, and vitamin E) for chronic anal fissures in adults?

Bottom line

Healing rates with topical nitroglycerin are roughly 60% versus 40% with placebo at 8 weeks. Topical CCBs are at least as good as nitroglycerin, with a lower risk of headache (7% versus 56%). Based on 1 RCT, topical vitamin E may be superior to nitroglycerin (86% versus 66% healed at 8 weeks).

Evidence

Five meta-analyses of RCTs from the past 10 years were identified.¹⁻⁵ Adjunctive treatments were usually unclear (often fibre therapy or dietary advice). Healing was defined based on examination findings or patient report. Results were statistically significant unless indicated.

Context

- Guidelines recommend topical CCBs.⁷ Botulinum toxin injections and surgery are options for treatment failure, but fecal incontinence is possible.⁷
- For an 8-week treatment, compounded topical CCBs or nitroglycerin cost roughly \$60 per 30 g (personal communication from Stacy Jardine, Clinical Pharmacist, Peace River Value Drug Mart in Peace River, Alberta; 2022). Commercially available vitamin E ointment costs about \$10 per 50 g.⁸

Implementation

Anal fissures are commonly found in middle-aged adults and in children.⁹ They are primarily diagnosed by clinicians, with symptoms including pain during or after passage of stool, rectal bleeding, and linear tear (with or without a sentinel tag).¹⁰ Most fissures are at the midline. Fissures not in the midline should be investigated for secondary causes (eg, Crohn disease).¹¹ Differential diagnosis of severe anal pain includes fissure, thrombosed hemorrhoids, or perirectal abscess.⁹ Rectal bleeding is not necessarily diagnostic of malignancy but requires assessment and consideration of other risks factors.¹²

1. Weston M, Connolly A, et al. A systematic review of topical sphincterotomy treatments for anal fissure. *Cochrane Database Syst Rev*. 2021 Oct 4. <https://doi.org/10.1002/14651858.RD20210444>.
2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. ...
11. ...
12. ...



POLITICS

LIVE

ANAL FISSURE TREATMENTS



HEALING RATES

- | | NNT | |
|-----------------|-----|--------------------------|
| • CCB | 3 | |
| • Nitroglycerin | 4 | 18% stop due to headache |
| • Vitamin E | 5 | |

ANAL FISSURE TOPICAL TREATMENTS

LIVE

 **DISTILLED**

COUGH

ANAL FISSURES

DIVERTICULITIS

PRUNE JUICE

NEXT UP IN...

POLITICS

LIVE

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Praxis

Rapid recommendations

Updates from 2021 guidelines: part 1

Danielle O'Toole MD MSc CCFP

Before physicians can incorporate evolving guideline evidence into their practices, they must first be able to identify salient key updates, which can be buried in lengthy articles. That barrier can delay the integration of novel approaches into clinical care. This article is the first in a 2-part series focusing on key guideline recommendations that were updated or introduced in 2021. Family physicians are always encouraged to appraise each recommendation prior to considering its implementation, as some recommendations are based on low-quality evidence or expert opinion.

Guideline updates

For secondary prevention, the Canadian Cardiovascular Society (CCS) recommends additional non-statin therapy for patients taking maximally tolerated statin therapy and with low-density lipoprotein cholesterol [non-HDL-C] levels of 1.8 mmol/L or greater (or non-HDL-C levels of 0.7 g/L or greater).

acid with 1 additional risk factor, as well as for patients with stable cardiovascular disease or peripheral arterial disease prescribed combination therapy.

The CCS and the CHRS suggest a blood pressure target of 130/80 mm Hg or less for patients with atrial fibrillation (strength of recommendation and quality of evidence not provided).⁴ Hypertension Canada guidelines do not list patients with atrial fibrillation as a specific population.⁵ However, the authors of the 2020 CCS and CHRS guidelines on atrial fibrillation recommend a target blood pressure of 130/80 mm Hg or less at rest and 200/100 mm Hg or less at peak exercise, with angiotensin-converting enzyme inhibitors (ACEIs) being the preferred treatment option.⁴ This recommendation is consistent with multiple guidelines from other countries.^{6,9}

The CCS and the Canadian Heart Failure Society recommend that patients with heart failure with reduced ejection fraction (HFrEF) be treated with 1 evidence-based medication from each of the following categories: angiotensin receptor-neprilysin inhibitor (ARNI) (or angiotensin receptor blocker [ARB]); β -blocker; mineralocorticoid receptor antagonist; and sodium-glucocorticoid cotransporter 2 inhibitor (strong recommendation).¹⁰ The previous guideline recommended ACEI as the first-line therapy if the patient remained symptomatic despite the ACEI. Although the guideline is still an indication to start an ARNI, the superiority of ARNIs in

POLITICS

LIVE



UNCOMPLICATED DIVERTICULITIS = NO ANTIBIOTICS

 **DISTILLED**

effects for patients with... combination anticoagulant... moderate-quality... weak recommendation, moderate-quality... RCTs investigating the use of... oral anticoagu... not provided)... described good asthma control as... time symptoms or the need for fewer...

ANTIBIOTICS = NO DIFFERENCE IN:

- *Time to resolution*
- *Readmission or surgery*
- *Complications*

Only if uncomplicated (i.e. no comorbidities, no frailty, no vomiting, normal CRB / WBC)

**UNCOMPLICATED DIVERTICULITIS
= NO ANTIBIOTICS**

LIVE

 **DISTILLED**

COUGH

ANAL FISSURES

DIVERTICULITIS

PRUNE JUICE

NEXT UP IN...

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Top studies of 2022 relevant to primary care

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POLITICS

LIVE

PRUNE JUICE MAY BE EFFECTIVE FOR CONSTIPATION



tables of
Journal of Medicine, the
American College of
ACCFSSS,² and the American College of
relevant to primary care practice. Identifying
of primary care professionals. Owing to
we searched publica-
15-time

PRUNE PRESCRIPTION

- 54g / day = 50% had normal BMs vs. placebo (25%)
- Single industry-sponsored trial, NNT = 4, n=84

POLITICS

**PRUNE JUICE FOR
CONSTIPATION**

LIVE

 **DISTILLED**



NEW GUIDELINES

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 **DISTILLED**

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SPORTS UPDATE

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 **DISTILLED**

STEROIDS & MONO

STATINS & MUSCLE

HEART FITNESS

NEXT UP IN...

SPORTS UPDATE

LIVE

 **DISTILLED**

STEROIDS & MONO

STATINS & MUSCLE

HEART FITNESS

NEXT UP IN...

SPORTS UPDATE

LIVE

 **DISTILLED**



Corticosteroids for infectious mononucleosis

Kyle Gomes Ran D. Goldman MD FRCPC

Abstract

Question Infectious mononucleosis (IM) is a common viral infection year round, and we see patients with it in our family medicine clinic frequently. With fatigue, fever, pharyngitis, and cervical or generalized lymphadenopathy causing prolonged illness and school absences, we always look for treatments that will shorten the duration of symptoms. Does treatment with corticosteroids benefit these children?

Answer Current evidence points to small and inconsistent benefits when using corticosteroids for symptom relief in children with IM. Corticosteroids alone or in combination with antiviral medications should not be given to children for common symptoms of IM. Corticosteroids should be reserved for those with impending airway obstruction, autoimmune complications, or other severe circumstances.

Corticostéroïdes pour le traitement de la mononucléose infectieuse

Résumé

Question La mononucléose infectieuse (MI) est une infection virale courante tout au long de l'année. Nous voyons souvent des patients qui en sont atteints à notre clinique de médecine familiale. Étant donné que la MI se manifeste par de la fatigue, de la fièvre, une pharyngite et une adénopathie cervicale ou généralisée causant une maladie et des absences de l'école prolongées, nous sommes toujours à l'affût de traitements qui réduiront la durée des symptômes. Le traitement par corticostéroïdes est-il bénéfique pour ces enfants?

Réponse Selon les données actuelles, le recours à des corticostéroïdes pour le soulagement des symptômes des enfants atteints de MI procurerait des bienfaits faibles et inégaux. On ne doit pas administrer des corticostéroïdes seuls ou en association avec des antiviraux aux enfants qui présentent des symptômes courants de MI. Il faut réserver les corticostéroïdes aux enfants chez qui l'obstruction des voies aériennes est imminente, ou à ceux qui présentent des complications auto-immunes ou qui sont confrontés à d'autres circonstances graves.

Corticosteroid use in IM

Corticosteroids exert anti-inflammatory properties through interactions with inflammatory genes. Specifically, after binding to responsive elements alter inflammatory cytokines, chemokines, adhesion molecules, and matrix metalloproteinases.¹² Corticosteroids are recommended for patients with severe symptoms of IM such as airway obstruction, splenomegaly, anemia, and thrombocytopenia.¹³ However, corticosteroid relief is not considered standard and there is no evidence of varying degrees of efficacy.^{7,8} In a meta-analysis of 7 randomized controlled trials between 14

SPORTS

LIVE

STEROID USE IN MONO

CFP DISTILLED

IN CHILDREN:

- *Cochrane review:
Small, inconsistent benefit for pain only*
- *Less pain at 12 hours (but not at 24–36 h)*
- *Risk of adverse events*

STEROIDS IN MONO

LIVE

 **DISTILLED**

STEROIDS & MONO

STATINS & MUSCLE

HEART FITNESS

NEXT UP IN...

SPORTS UPDATE

LIVE

 **DISTILLED**

Risk of muscle symptoms while taking statins

Jamie Falk PharmD Allison Paige MD CCFP Nicolas Dugré PharmD MSc BCACP G. Michael Allan MD CCFP FCFP

Clinical question

What are the effects of statins on muscles?

Bottom line

Statins increase the risk of muscle symptoms (pain, cramps, weakness) in the first year of use, from 14.0% (placebo) to 14.8%, but are similar to placebo in 1 year. Only 1 patient-reported muscle symptom in 15 is due to the statin. Statins may increase muscle symptoms with creatine kinase rising to 10 times normal levels for 1 in about 3000 patients over placebo.

Evidence

Seven systematic reviews (11 to 135 RCTs; N=18,192 to 192,977) from the past 5 years examine this.¹⁻⁷ We focus on the most recent (23 RCTs; 154,664 patients over 4.3 years).¹ Results are statistically significant unless indicated.

- Any muscle symptoms for statin versus placebo ...
 - Anytime: 27.1% versus 26.6% (placebo).¹
 - Within the first year: 14.8% versus 14.0%, number needed to harm of 125.
 - After the first year: 14.8% versus 15.0% (not statistically different).
- Other systematic reviews²⁻⁷ had similar but not statistically different results for myalgia,⁸ those 65 and older,⁴ and intensity versus placebo.² No difference by statin type,³ lipophilic or hydrophilic statins,⁶ or age group.^{1,5,6}
- Any muscle symptoms, more- versus less-intense statin ...
 - Any time point: 36.1% versus 34.8% (less intense).¹
 - Other systematic reviews found similar results.²
- Creatine kinase level more than 10 times the upper limit of normal (myopathy): 0.077% versus 0.044% (placebo).¹
- Systematic reviews⁵⁻⁸ found no difference for ap...

Context

- Mean creatine kinase rise¹ with statins was about 29%.
- Myopathy and rhabdomyolysis are too infrequent to discern statin effects in meta-analysis of more than 100,000 RCT participants. Statin-induced rhabdomyolysis is estimated to be 2 to 3 excess cases per 100,000 patient-years.¹

Implementation

Statins are the most effective lipid-lowering drugs to prevent cardiovascular (CV) diseases, with a relative risk reduction of 25% to 35% for CV events and about 10% for mortality.^{10,11} For nonsevere muscle symptoms possibly caused by a statin, other causes should be excluded.¹² If none is identified, stop the statin and try a rechallenge in a few weeks with the same dose, a lower dose, a different statin, or alternate-day dosing, as most patients will tolerate rechallenge.^{8,10,12} Nonstatin therapies appear to have fewer CV benefits and no mortality effect and should be considered only if statin intolerance is severe or unmanageable.^{10,11}

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Competing interests

None declared

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LIVE

STATIN MUSCLE MYTHS

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RATE OF MUSCLE SYMPTOMS

Year 1:

- *Year 1: Placebo: 14%*
- *Statins: 14.8%*

After year 1: Similar

STATIN MYTHS

LIVE

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STEROIDS & MONO

STATINS & MUSCLE

HEART FITNESS

NEXT UP IN...

SPORTS UPDATE

LIVE

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Praxis

Rapid recommendations Updates from 2022 guidelines: part 1

Danielle O'Toole MD MSc CCFP

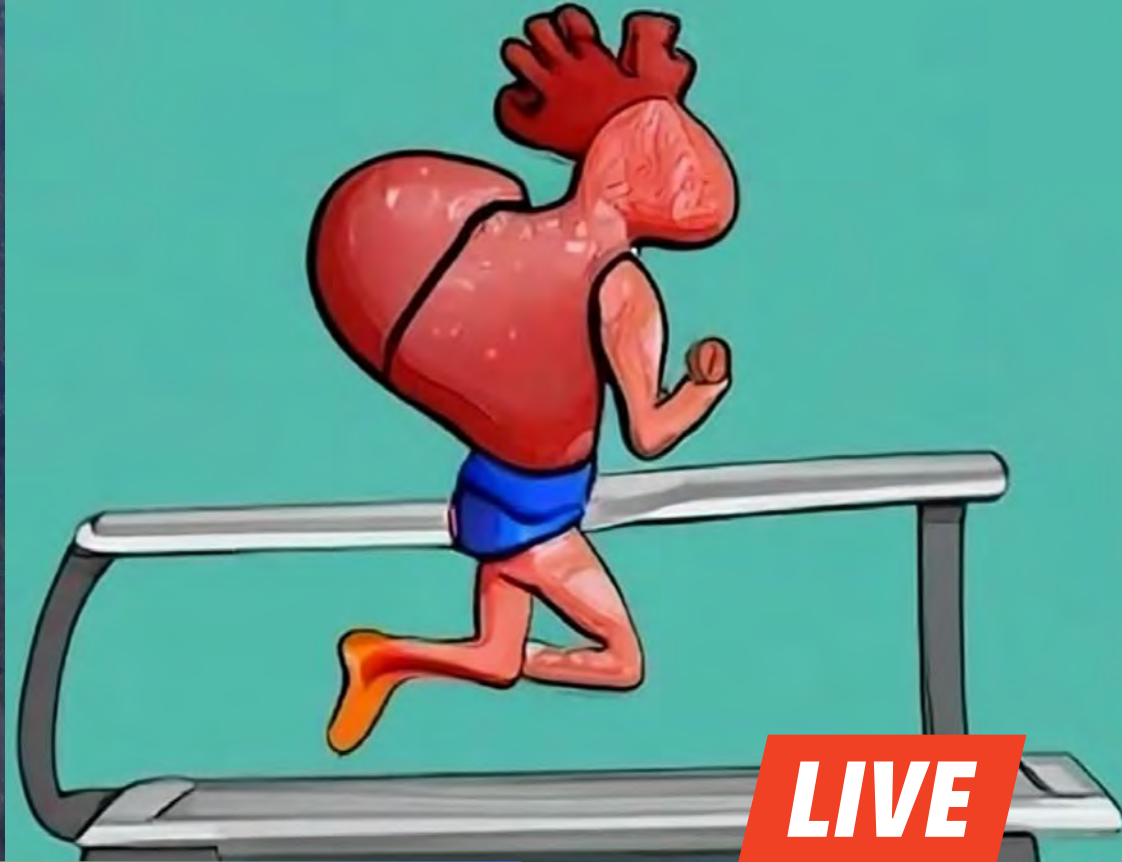
Staying current with evolving guideline evidence is crucial in medicine, yet the sheer volume of lengthy articles being published can make this challenging. This article is the first in a 3-part series summarizing clinical guideline recommendations updated in 2022 that are relevant to primary care in Canada. As always, family physicians are advised to appraise the recommendations before considering implementation, as some may be based on low-quality evidence or expert opinion.

Guideline updates

The Canadian Cardiovascular Society (CCS) and The Canadian Pediatric Cardiology Association issued new guidelines recommending universal screening for dyslipidemia in children aged 2 to 10 (expert opinion).¹ This guideline was developed based on the prevalence of familial hyperlipidemia (approximately 1 in 300 Canadians), ease of detection, and availability of effective management options. Furthermore, the American College of Cardiology (ACC) and American Heart Association (AHA) 2018 guideline also recognizes the importance of pediatric lipid screening; according to the guideline, children with a family history of early cardiovascular disease and hypercholesterolemia should be screened.

of B-type natriuretic peptides.³ This 2022 guideline recommends the use of angiotensin-converting enzyme inhibitors (ACEIs) (class 1 recommendation, level A evidence) and β -blockers (class 1 recommendation, level C evidence) for patients with left ventricular ejection fraction (LVEF) less than or equal to 40% to prevent symptomatic HF and reduce mortality.

The ACC and AHA and the CCS recommend consideration of sodium-glucose cotransporter-2 inhibitors (SGLT2Is) to reduce risks of hospitalization and cardiac death in patients with HF, including those with HF with mildly reduced ejection fraction (LVEF 41% to 49%), HF with improved ejection fraction (LVEF previously \leq 40% but now $>$ 40%), or HF with preserved ejection fraction (HFpEF; LVEF $>$ 50%) (class 2a recommendation).^{3,4} The EMPEROR-Preserved (Empagliflozin Outcome Trial in Patients with Chronic Heart Failure with Preserved Ejection Fraction) study demonstrated a reduction in rates of hospitalization and CV death but not in all-cause mortality in patients taking empagliflozin with symptomatic HF and LVEF greater than 40%.³ The ACC and AHA continue to recommend guideline-directed medical therapy, including the use of ACEIs, β -blockers, and mineralocorticoid receptor antagonists (MRAs) for patients with HF with improved ejection fraction and consideration of the same for patients with HFpEF, consider an MRA if eGFR is less than 5.0 mmol/L. If eGFR is \geq 5.0 mmol/L and eGFR is greater than 30 mL/min/1.73 m² to improve diastolic function and decrease the risk of hospitalization. Additionally, in a post hoc group analysis, there was a possible benefit of angiotensin receptor inhibitor in women with HFpEF with



SPORTS UPDATE

LIVE

CARDIAC FITNESS

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TREAT* PRE-HEART FAILURE IF

No symptoms and:

- Structural changes, or
- Risk factors, or
- Elevated BNP

** β blocker & ACE inhibitor & ACC, AHA, HFSA 2022 Guideline*

SPORTS UPDATE

LIVE

PRE-HEART FAILURE

 **DISTILLED**

NEW TERMS

HFpEF

- *No medications reduce all-cause mortality*
- *SGLT-2 inhibitors ↓ CV death, ↓ admissions, ↑ QOL*

HFrEF:

- *ACEi, β blocker, MRA, SGLT-2i*

HEART FAILURE

LIVE

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NEW GUIDELINES

TOP HEADLINES

COOKING & FOOD

POLITICS

SPORTS

KIDS NEWS

WEATHER

TRAVEL

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LIPIDS & KIDS

ACNES

EAR PIERCINGS

BULLOUS BABIES

PNEUMONIA

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BULLOUS BABIES

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Praxis

Rapid recommendations

Updates from 2022 guidelines: part 1

Danielle O'Toole MD MSc CCFP

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of B-type natriuretic peptides.³ This 2022 guideline recommends the use of angiotensin-converting enzyme inhibitors (ACEIs) (class 1 recommendation, level A evidence) and β -blockers (class 1 recommendation, level C evidence) for patients with left ventricular ejection fraction (LVEF) less than or equal to 40% to prevent symptomatic HF and reduce mortality.

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LIVE

SCREEN LIPIDS IN ALL KIDS

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UNIVERSAL LIPID SCREENING

- *Check all kids age 2–10*
- *1 in 300 Canadians have familial hyperlipidemia*
- *CCS & CPCA, expert opinion*

USPSTF:

- *Don't*
- *Unnecessary, maybe harmful*

SCREEN LIPIDS IN ALL KIDS

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LIPIDS & KIDS

ACNES

EAR PIERCINGS

BULLOUS BABIES

PNEUMONIA

NEXT UP IN...

KIDS NEWS

LIVE

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Anterior cutaneous nerve entrapment syndrome in children

Hiroyuki Hayashi MD Ryutaro Tanizaki MD PhD Yousuke C. Takemura MD PhD Ran D. Goldman MD FRCPC

Abstract

Question I frequently see adolescents with recurrent abdominal pain in my family medicine clinic. While the diagnosis frequently is a benign condition such as constipation, I recently heard that after 2 years of recurrent pain, an adolescent was diagnosed with anterior cutaneous nerve entrapment syndrome (ACNES). How is this condition diagnosed? What is the recommended treatment?

Answer Anterior cutaneous nerve entrapment syndrome, first described almost 100 years ago, is caused by entrapment of the anterior branch of the abdominal cutaneous nerve as it pierces the anterior rectus abdominis muscle fascia. The limited awareness of the condition in North America results in misdiagnosis and delayed diagnosis. Carnett sign—in which pain worsens when using a “hook-shaped” finger to palpate a purposefully tense abdominal wall—helps to confirm if pain originates from the abdominal viscera or from the abdominal wall. Acetaminophen and nonsteroidal anti-inflammatory drugs were not found to be effective, but ultrasound-guided local anesthetic injections seem to be an effective and safe treatment for ACNES, resulting in relief of pain in most adolescents. For those with ACNES and ongoing pain, surgical cutaneous neurectomy by a pediatric surgeon should be considered.

Recurrent chronic abdominal pain is common among children and adolescents, and diagnosis may be challenging.¹ Abdominal pain may disrupt daily routines for patients and their families² and impact their quality of life.¹ The pathology leading to acute and chronic abdominal pain in children, especially pain in the abdominal wall, may be difficult to classify.³ Common reasons for severe pain include gastroenteritis, constipation, and systemic viral illness. More severe illnesses needing immediate attention are appendicitis, intussusception, cholecystitis, pancreatitis, testicular or ovarian pain (torsion), entrapped (incarcerated) hernias, and chronic appendicitis.^{4,5}

Forgotten diagnosis

One diagnosis frequently overlooked in both adults and children is anterior cutaneous nerve entrapment syndrome (ACNES), first described almost 100 years ago.⁶ In a study of 100 patients, 10% of patients were forgotten

up to 10% to 30% of patients with chronic abdominal wall pain.¹² Some case reports of children 9 to 16 years of age have documented the condition in several countries,^{13,14} and among 48 adolescents with ACNES at Boston Children's Hospital in Massachusetts, 9 required surgery.¹⁵

The limited awareness of the condition results in misdiagnosis of conditions in which pain arises from a visceral source, often resulting in unnecessary diagnostic testing, ongoing pain, and considerable cost.¹¹ Some children were considered to have functional abdominal pain¹⁶ or mental health-related conditions that resulted in delays in definitive diagnosis.⁹

While reported to be associated with previous surgeries and adhesions, most pediatric patients with the condition do not have a history of surgery. In some, ACNES seems to be associated with sporting events antecedent to onset of pain,¹⁵ but by far most patients do not report any trauma to the abdominal wall. Characterization of the pain in children may vary, but most will report sharp stabbing pain that is localized to the abdominal wall.

CFP April 2023, 69 (4) 257–258;



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“THE FORGOTTEN DIAGNOSIS”

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COMMONLY MISSED

- *Anterior Cutaneous Nerve Entrapment Syndrome (ACNES)*
- *Diagnose with Carnett's sign*
- *Treat with US-guided local anesthetic injection*

“THE FORGOTTEN DIAGNOSIS”

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LIPIDS & KIDS

ACNES

EAR PIERCINGS

BULLOUS BABIES

PNEUMONIA

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Ear-piercing complications in children and adolescents

Michelle M. Kim Ran D. Goldman MD FRCPC

Abstract

Question Ear piercing is one of the most common forms of body modification seen in children and adolescents presenting to my office. Parents of my younger pediatric patients inquire about potential post-piercing complications and risk factors associated with earlobe infections. What guidance should I give them? Also, are there any specific post-piercing complications to consider for older pediatric patients seeking second piercings in the upper cartilage area?

Answer Piercing the earlobe or auricular cartilage continues to be a popular procedure among children and adolescents. Despite its widespread practice, improper aseptic piercing technique, insufficient training, and trauma to the soft tissue during high-pressure piercing (eg, use of spring-loaded ear-piercing instruments) can increase one's susceptibility to infections, bleeding, and microfractures. Other post-piercing complications include embedded earrings, keloids, hypertrophic scarring, and cutaneous hypersensitivity. Early recognition and treatment of infections and perichondritis secondary to transcartilaginous piercings can prevent the progression of severe ear deformities requiring reconstructive surgical interventions.

Complications du perçage des oreilles chez les enfants et les adolescents

Résumé

Question Le perçage des oreilles est l'une de formes de modifications corporelles que je vois communément chez les enfants et les adolescents qui viennent à ma clinique. Les parents de mes plus jeunes patients pédiatriques s'informent des complications potentielles à la suite du perçage des oreilles et des facteurs de risque associés aux infections des lobes d'oreille. Quels conseils devrais-je leur donner? De plus, y a-t-il des complications particulières dont il faut tenir compte à la suite des perçages chez les patients pédiatriques plus âgés qui en veulent d'autres, dans la région du cartilage supérieur?

Réponse Le perçage des lobes d'oreilles ou du cartilage auriculaire continue d'être une procédure populaire chez les enfants et les adolescents. Malgré la généralisation de cette pratique, une technique de perçage mal aseptisée, une formation insuffisante et un traumatisme aux tissus mous durant un perçage à haute pression (p. ex. le recours à des instruments de perçage d'oreilles à ressort) peuvent accroître la susceptibilité d'une personne à des infections, des saignements et des microfractures. Parmi d'autres complications ultérieures à un perçage figurent l'incrustation des oreilles, des cicatrices chéloïdes ou hypertrophiques et une hypersensibilité cutanée. La détection et le traitement précoces des infections et de la péricondrite secondaire à des perçages à travers le cartilage peuvent prévenir des déformations graves des oreilles qui exigeraient des interventions chirurgicales de reconstruction.

significantly more frequent respectively.

CFP Sep 2022, 68 (9) 661-663



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EAR-PIERCING COMPLICATIONS

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COMPLICATIONS:

- *Embedded*
- *Keloids / hypertrophic scarring*
- *Nickel–allergic contact dermatitis*
- *Auricular perichondritis*

EAR–PIERCING

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ACNES

EAR PIERCINGS

BULLOUS BABIES

PNEUMONIA

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Case Report

Editor's key points

- ▶ Chronic bullous disease of childhood is the most common pediatric autoimmune bullous disease. It presents with tense blisters, often in the classic string-of-pearls or crown-of-jewels pattern.
- ▶ The condition is often self-limiting and can resolve spontaneously without treatment. Mild cases can be treated with topical corticosteroids.
- ▶ Dapsone or sulfapyridine are the first-line systemic treatments, and the patient's glucose-6-phosphate dehydrogenase level must be measured before starting these medications. Other treatments include colchicine and penicillin or macrolide antibiotics.
- ▶ The differential diagnoses for skin blistering in infants and children are extensive and include both common and very rare disorders. If infectious causes have been excluded and autoimmune blistering is suspected, referral to a pediatric dermatologist is recommended.

Points de repère du rédacteur

- ▶ La maladie chronique bulleuse de l'enfance est la plus commune des affections bulleuses auto-immunes pédiatriques. Elle se présente sous la forme de cloques tendues, souvent semblable à un collier de perles ou à des bijoux sur une couronne.
- ▶ L'affection se résorbe souvent d'elle-même et peut disparaître sans traitement. Les

Not all that blisters is infectious

Rosalind Ashton MD CCFP Caroline Mahon MD FRACP

A child who presents with blistering that is not due to an infectious cause can represent a diagnostic challenge for primary care physicians. Pediatric autoimmune bullous diseases encompass several very uncommon blistering skin conditions, including chronic bullous disease of childhood (CBDC), pemphigus vulgaris and pemphigus foliaceus, bullous pemphigoid, dermatitis herpetiformis, and epidermolysis bullosa acquisita. The hallmark of these diseases is bullae or blistering caused by autoantibody-mediated disruption of the structural anchoring components of the epidermis that results in microscopic and macroscopic cleavage, either intraepidermal or subepidermal.

We report a case of a child with a classic clinical presentation of CBDC, characterized by the crown-of-jewels or string-of-pearls sign, in which vesicles and bullae form in close proximity with an annular morphology. The presentation may mimic herpes simplex and varicella zoster virus infection. A comprehensive search of MEDLINE, EMBASE, and Scopus databases using the key words *CBDC*, *linear IgA disease*, and *pediatric autoimmune bullous disease* allowed for the collection of English-language articles.

Case

An 11-year-old girl with an unremarkable medical and family history presented to the emergency department with multiple annular blistering plaques on her upper back. There was no mucosal or scalp involvement. She was diligently applying medium-potency topical corticosteroid and 1% mupirocin ointments to the lesions, without benefit. Findings of a systems inquiry were negative. On examination, we observed a polycyclic eruption of annularly arranged vesicles—the classical string-of-pearls pattern—extending across the patient's upper back (Figure 1). Findings on examination of the rest of her skin, mucous membranes, nails, and hair, as well as her lymph nodes, abdominal viscera, and chest, were unremarkable.

Discussion

The approach to differential diagnosis of skin blistering in children varies with the age at presentation. In infancy and in school-aged children, infectious causes are most common; therefore, excluding infections such as herpes simplex virus, varicella zoster virus, and staphylococcal scalded skin syndrome are essential for micro-



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BLISTERING DISEASE

The logo for CFP DISTILLED, featuring a stylized white bottle with a black cap and the letters "CFP" inside, followed by the word "DISTILLED" in a bold, white, sans-serif font.

String-of-pearls sign



DIAGNOSING CBDC

- *Tense clear or hemorrhagic blisters
0.3–2.0 cm diameter*
- *Biopsy & immunofluorescence*

CHRONIC BULLOUS DISEASE OF CHILDHOOD (CBDC)

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BULLOUS BABIES

PNEUMONIA

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LIVE

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Child Health Update

Antibiotic treatment duration for community-acquired pneumonia in children

Shalini Singla ACPR Kendra Sih PharmD Ran D. Goldman MD FRCPC

Abstract

Question A 4-year-old child was seen in our clinic with a clinical presentation consistent with community-acquired pneumonia (CAP). He was prescribed oral amoxicillin and a colleague asked about the duration of treatment. What is the current available evidence for treatment duration for uncomplicated CAP in an outpatient setting?

Answer Previously the recommended duration of antibiotic treatment of uncomplicated CAP was 10 days. Recent evidence from several randomized controlled trials suggests that a 3- to 5-day duration is noninferior to a longer treatment course. In an effort to prescribe the shortest effective duration of antibiotics to minimize the risk of antimicrobial resistance associated with prolonged antibiotic use, family physicians should offer 3 to 5 days of appropriate antibiotics and monitor the recovery of children with CAP.

Five- and 10-day treatment courses

Community-acquired pneumonia (CAP) is a common pediatric illness. The incidence of CAP has declined in high-income countries but is still a substantial burden to patients and health systems in low- and middle-income countries, partly due to lower childhood immunization rates.¹ In 2022 the World Health Organization reported that pneumonia accounts for 14% of all deaths in children younger than 5 years of age and 22% of all deaths in children aged 1 to 5 years.² The most common viral cause of pediatric CAP is respiratory syncytial virus, followed by influenza viruses.^{1,3} Streptococcus pneumoniae is the predominant cause of pediatric bacterial CAP.^{1,3} Other bacterial causes include Haemophilus influenzae type b, Staphylococcus aureus, Mycoplasma pneumoniae, and Chlamydia pneumoniae.^{1,3} Optimal antibiotic treatment of bacterial CAP should provide adequate coverage of choice of antibiotic to

Three studies compared 5 and 10 days of treatment. A double-blind, randomized, placebo-controlled trial by researchers in Israel published in 2014 started comparing short (3-day) and long (10-day) durations of high-dose amoxicillin (80 mg/kg/day divided into 3 doses) for radiographically confirmed alveolar CAP in 108 febrile children with leukocytosis aged 6 to 59 months who were suitable for outpatient management.⁴ The primary outcome, treatment failure, was described as "a situation assessed by the study physicians to be nonresponsive or deteriorating to the point that the study drug needed to be replaced, or if the patient was hospitalized due to deterioration in medical condition."⁶ Statistically significant treatment failure rates early in the 3-day arm compared with the 10-day arm (40% vs 0%, respectively) led to a change in methods and the investigators evaluated 5 days versus 10 days of therapy. With no treatment failure in either arm, the authors concluded that 5 days of treatment was not inferior to 10 days of treatment of uncomplicated pneumonia. The relatively small number of participants included in this study, the strict criteria of



LIVE

CAP IN KIDS

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ate for outpa... treatment for outpa... of interest... CAP has been a topic of interest... that the historically used 10-day dur... (me... JUNE | JUN 2023

ANTIBIOTICS: 3–5 DAYS, NOT 10

- *5 days noninferior to 10 days*
- *More recently: 3 days noninferior to 7 days**
- *Most studies: children > 6 months of age*

*Multiple recent RCTs & systematic reviews
n=814, JAMA 2021;326(17):1713–24

UNCOMPLICATED CAP IN KIDS

LIVE

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NEW GUIDELINES

TOP HEADLINES

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KIDS NEWS

WEATHER

TRAVEL

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DEPRESSION TOOL

POLLEN BLOOM

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Individualized antidepressant therapy in patients with major depressive disorder

Tracy Chin ACPR PharmD
Clark Svrcek MD CCFP
Trudy Huyghebaert PharmD
Oloruntoba Oluboka MBBS FRCP

Abstract To introduce a visual clinical decision support tool to assist with individualizing first-line antidepressant pharmacotherapy for adults with major depressive disorder (MDD) in a Canadian context.

Sources of information A literature review was conducted with Google Scholar, PubMed, the Cochrane Database of Systematic Reviews, and Trip Pro using the MeSH headings depression, antidepressive agents, primary care, practice patterns, medication adherence, and decision making, shared.

Main message Major depressive disorder affects about 4.7% of Canadians annually and is a prevalent condition encountered and diagnosed in primary care. Untreated depression is associated with decreased quality of life, increased risk of suicide, and worsening physical health outcomes when depression co-occurs with other chronic medical conditions. In a network meta-analysis, antidepressant medications (such as selective serotonin reuptake inhibitors, serotonin-norepinephrine reuptake inhibitors, bupropion, and vortioxetine) reduced depressive symptoms by 50% or more when compared with placebo in acute treatment of adults with moderate to severe MDD. Poor treatment adherence and high discontinuation rates limit MDD treatment success. Factors such as strong therapeutic alliances between patients and prescribers, collaborative care, patient education, and supportive self-management have been shown to enhance treatment adherence. The most recent Canadian Network for Mood and Anxiety Treatments depression treatment guidelines (published in 2016) suggest 15 different first-line treatment options for the treatment of MDD. There is a need for decision support aids to individualize antidepressant therapy.

Editor's key points

- ▶ While depression is a prevalent condition seen in primary care, primary care providers have limited guidance in tailoring depression therapy to patients.
- ▶ Antidepressive agents (eg, selective serotonin reuptake inhibitors, serotonin-norepinephrine reuptake inhibitors, bupropion, vortioxetine) are effective in substantially reducing symptoms for select patients experiencing moderate to severe depression. Earlier treatment of major depressive disorder is associated with better outcomes.
- ▶ A clinical decision support tool for individualizing first-line antidepressants may be useful in primary care practices to help prescribers and patients collaborate in depression treatment.

CFP Nov 2022, 68 (11) 807-814;



ANTIDEPRESSANT TOOL

LIVE



No comorbidities

No Depression Specifiers

ANY first-line agent³³

Depression Specifiers³³

Sleep disturbances³³

- Mirtazapine

Cognitive dysfunction³³

- Vortioxetine
- SSRIs (vs placebo)
- Duloxetine
- Bupropion

Anxious distress³³

- Paroxetine
- Duloxetine
- Sertraline
- Escitalopram
- Venlafaxine

Somatic symptoms³³

Fatigue

- Duloxetine
- Bupropion
- SSRIs (vs placebo)

Pain

- Duloxetine
- Venlafaxine
- Desvenlafaxine

- SSRI: citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, sertraline
- SNRI: desvenlafaxine, duloxetine, venlafaxine
- Other: bupropion, mirtazapine, vortioxetine

Choice based on adverse effects, cost, drug interactions, and other considerations

Comorbidities present

Central nervous system

Smoking cessation

- Bupropion up to 300 mg daily; combine with nicotine-replacement therapy (NNT=8)⁴⁴

Alcohol use disorder⁶

- **Abstinence:** sertraline up to 200 mg daily combined with naltrexone NNT=4. Mood benefits not significant⁴³
- **Mood:** mirtazapine 45 mg daily 50% reduction in HAM-D and HAM-A scores⁶⁵

ADHD

- Bupropion up to 450 mg daily SMD -0.5 in ADHD scores⁵⁹
- Duloxetine up to 60 mg daily improvement in ADHD scores (limited data)⁷

Pain

Chronic low back pain

Duloxetine 60-120 mg daily ≥30% ↓ pain inconsistent (ADR NNH~6-12)^{18,37}

Osteoarthritis

Venlafaxine 150-225 mg ↓ 30% pain in hip and knee osteoarthritis in 9/18 patients⁵⁶
Duloxetine 60-120 mg daily ↓ knee osteoarthritis pain only NNT=7 (ADR NNH=17)^{14,18,37}

Migraine prophylaxis

- Venlafaxine up to 150 mg daily small RCT equivalent to TCA^{10,42}
- Duloxetine 60 to 120 mg daily ↓ number of headache days (limited data)⁶⁶

Cardiovascular

Heart failure

- Sertraline safe. No significant mood benefit⁴⁰

Acute coronary syndrome

- Escitalopram 5-20 mg daily ↓ MACE (MI) post-acute coronary syndrome (NNT=8 over 8 years)³⁴
- Sertraline safe to use. No significant cardiovascular benefits, underpowered for mood outcomes²⁶

Gastrointestinal

Irritable bowel syndrome (constipation and abdominal pain)

- Paroxetine, fluoxetine, citalopram 55% ↓ global irritable bowel syndrome symptoms vs placebo NNT=5) over 6-12 weeks. Non-significant change in abdominal pain vs placebo^{19,20}

Genitourinary

Loss of libido in women

- Bupropion 150 mg daily OR=3.2 (2.1-6.3) 'meaningful improvement' (NNT=2)⁵¹

Stress incontinence

- Duloxetine Quality-of-life improvement (SMD -0.13) NNT=8 and ↓ no. of episodes (ADR NNH=7)^{25,38}

Renal

Non-dialysis CKD

- Sertraline up to 200 mg daily. No mood benefit. ↑ GI symptoms (NNH=8-9)⁴³

Dialysis ESRD

- Sertraline to 200 mg daily. ↓ QIDS-C at 12 weeks vs CBT (-1.84, p=0.035)³⁹

ESRD-associated pruritus⁶

- Sertraline 50 mg (25-100 mg) ↓ pruritus score in ESRD (limited data)^{5,53}
- Mirtazapine 15 mg daily (limited data)^{5,24}

Diabetic peripheral neuropathy (PN)	Duloxetine 40-120 mg daily ↓ pain NNT=6 (ADR NNH@60 mg=20; NNH@120 mg=10) ^{35,37} Venlafaxine 150-225 mg daily ↓ pain NNT=5 (limited data) ^{22,37,50} Desvenlafaxine 200-400 mg daily (EXCEEDS depression dose) ³⁵
Fibromyalgia	Mirtazapine to 30 mg daily. Conflicting data. ↓ pain by ≥30% NNT=7-8 vs ADR NNH=9 ^{35,62} Duloxetine 60-120 mg daily ↓ pain NNT=8 vs ADR NNH@60 mg=18; NNH@120 mg=9 ^{35,37} SSRI small ↓ pain (10%) NNT=10 (low-quality RCTs) ^{37,60} Venlafaxine - limited benefit (no RCT) ³⁷
Chemotherapy-induced PN	Duloxetine 60 mg daily ↓ pain (-0.73 vs placebo) (NNT=5) ⁵⁴

Adult Depression Antidepressant Treatment based on Efficacy and Comorbidities

DEPRESSION TOOL

POLLEN BLOOM

NEXT UP IN...

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Tools for Practice

Antihistamines for allergic rhinosinusitis

Betsy Thomas BScPharm Anthony Train MBChB MSc CCFP G. Michael Allan MD CCFP FCFP

Clinical question

Do oral antihistamines (AHs) improve symptoms in adults with allergic rhinosinusitis?

Bottom line

Oral AHs reduce rhinosinusitis symptoms by 10% to 30% versus placebo over 2 to 12 weeks. Individual AHs appear to have comparable efficacy. More patients attain moderate improvement or better with intranasal corticosteroids (ICs) (about 80%) versus AHs (about 60%). There appear to be no meaningful differences between AHs and leukotriene receptor antagonists or when adding AHs to IC use.

Evidence

Results were statistically significant unless noted.
• Antihistamines versus placebo over 2 to 12 weeks:
-Systematic review (7 RCTs, 1218 patients)¹ found that for patient-rated nasal obstruction scores (scale 0 to 3), baseline=1.65; placebo improved symptoms 16% and AHs 48%.
-Systematic review (5 RCTs, 3329 patients)² of bilastine (newer AH) found total symptom score effect size=0.28, similar to improving symptoms 10% to 16% over placebo.³
AHs versus other AHs: no statistical or clinical

- Estimated cost for 30-day supply: cetirizine 10 mg, desloratadine 5 mg, or fexofenadine 120 mg, \$25; bilastine 20 mg, \$45; mometasone 50 µg or beclomethasone 50 µg, \$25; fluticasone 50 µg, \$40.¹²

Implementation

Antihistamines have comparable efficacy, so choice should be based on cost and adverse event profile. Patients presenting in primary care typically have moderate to severe rhinosinusitis symptoms and more patients are likely to benefit from nasal steroids versus AHs.¹³ Improvement with nasal steroids may take several days and full effect can take up to 2 weeks.¹³

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Competing interests

None declared

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WEATHER

ALLERGY MEDS REDUCE ALLERGY SYMPTOMS

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BEST ANTIHISTAMINE?

- *Bilastine: Less sedating (3% vs. 7% cetirizine), higher cost*
- *All have similar efficacy*

**1 RCT, n=162. **4 systematic reviews of 5 RCTs*

**ANTIHISTAMINES
REDUCE ALLERGY SYMPTOMS**

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NEW GUIDELINES

TOP HEADLINES

COOKING & FOOD

POLITICS

SPORTS

KIDS NEWS

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DEATH RATTLE

NEXT UP IN...

TRAVEL

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Reducing death rattle at the end of life

Jen Potter MD CCFP Christina S. Korownyk MD CCFP

Clinical question

Can medications reduce the incidence of terminal respiratory secretions (death rattle) at the end of life?

Bottom line

Best evidence supports prophylactic administration of scopolamine butylbromide (Buscopan, hyoscine butylbromide) in patients close to death but without death rattle, which reduces the number who develop death rattle (13% vs 27% with placebo). Evidence supporting treatment of death rattle once it has begun is less clear, with no evidence that one anti-muscarinic is clearly superior to another. There is no evidence that treatment of death rattle improves patient comfort. It may, however, reduce the distress of people at bedside. Treatment decisions should be guided by conversations with family or caregivers.

Evidence

Prophylaxis

- In 1 double-blind RCT,¹ 162 hospice patients in the dying phase (according to a multidisciplinary team) without death rattle were given scopolamine butylbromide, 20 mg subcutaneously 4 times daily, or placebo. Development of death rattle (score of 2 or 3 on a 3-point scale, higher scores indicating worse condition) at any point prior to death: 13% versus 27% (placebo); number needed to treat of 8.
- Adverse events (including restlessness, dry mouth, or urinary retention): no difference.
- One non-blinded RCT² with 132 adults close to death without death rattle examined prophylaxis versus treatment at onset of death rattle with scopolamine butylbromide 20 mg subcutaneously then 60 mg every 24 hours: 68% of patients with death rattle if treatment was initiated.

Context

- Death rattle is defined as noisy breathing caused by mucus in the upper respiratory tract.
- It occurs in 12% to 80% of patients in the final 3 days of life.³
- It may not distress patients; however, it may be distressing to family and caregivers.¹
- Nonpharmacologic measures include physical repositioning, although evidence to support this is lacking.³
- Scopolamine butylbromide (Buscopan) is available subcutaneously or orally in Canada.
- Scopolamine hydrobromide is different and can cause central nervous system effects.³

Implementation

While glycopyrronium is commonly used for death rattle, there is little evidence of efficacy or tolerability. Prophylaxis with scopolamine butylbromide appears more effective than treatment once death rattle is established, so it is reasonable to consider in a patient's dying phase. It is important to examine the reasons treatment is being explored, including patient and caregiver distress. Consideration of alternative supportive measures including reassurance and management of other symptoms (eg, pain or dyspnea) may provide greater comfort.

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Competing interests

None declared

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LIVE

REDUCING DEATH RATTLE

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HYOSCINE STOPS RATTLE

- *Prophylaxis: 13% develop (vs. 27% with placebo)**
- *After it presents:
Scopolamine = atropine = octreotide = placebo***

**1 RCT, n=162. **4 systematic reviews of 5 RCTs*

REDUCING DEATH RATTLE

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NEW GUIDELINES

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POLITICS

SPORTS

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WEATHER

TRAVEL

ONE FINAL TOPIC: IN CLOSING

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Clinical Review

Top studies of 2022 relevant to primary care

From the PEER team

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Abstract

Objective To summarize 10 high-quality medical articles published in 2022 that are relevant to primary care physicians.

Selecting the evidence Routine surveillance of tables of contents in relevant medical journals and EvidenceAlerts was conducted by the PEER (Patients, Experience, Evidence, Research) team, a group of primary care health care professionals with an interest in evidence-based medicine. Articles were selected and ranked based on relevance to practice.

Main message Published articles from 2022 most likely to influence primary care practice examined the following subjects: reducing dietary sodium for

Editor's key points

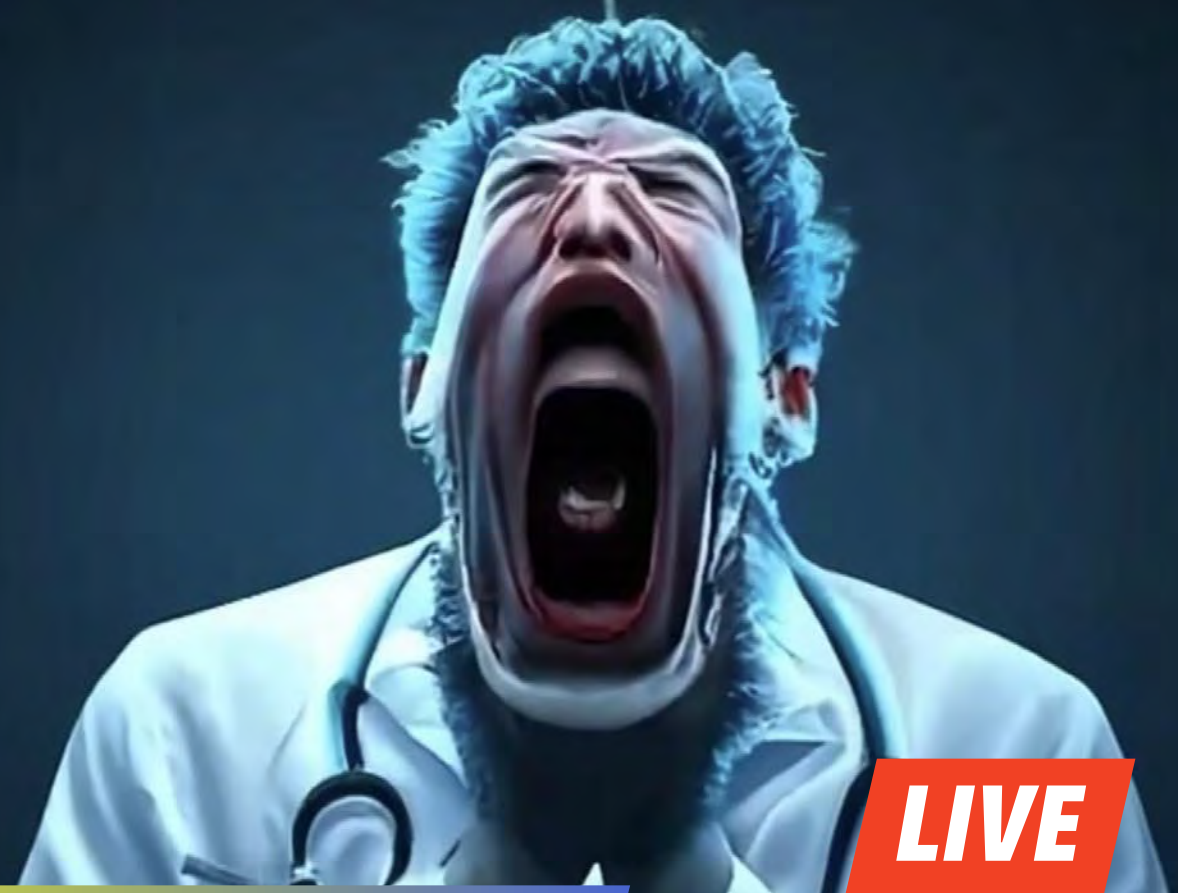
- Staying up to date on the vast amount of new literature relevant to primary care presents a considerable challenge. The authors of this review summarize what they believe were the top 10 studies (and 2 honourable mentions) of 2022 that could have meaningful effects on comprehensive family medicine practice.
- Studies relate to a variety of conditions and topics commonly encountered in primary care, including cardiovascular health, asthma, diabetes, weight loss, irritable bowel syndrome, constipation, and time required to provide primary care.
- Honourable mentions include a study of whether providing nonspeculum and self-sampling options increases uptake of cervical cancer screening and another examining medication nonadherence.

OVERWHELMED?

HOW MUCH TIME DO FAMILY DOCS NEED?

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tables of
Journal of Medicine, the
ACCFSSS,⁷ and the American College of
relevant to primary care practice. Ident
of primary care professionals. Owing
we searched publica

27 HOURS PER DAY

- 14 hrs: preventive care
- 7 hrs: chronic disease management
- 3 hrs: administration

Panel size assumed = 2500 patients

HOW MUCH TIME DO FAMILY DOCS NEED?



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