Rapid recommendations

Updates from 2021 guidelines: part 1

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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 (LDL-C) levels of 1.8 mmol/L or greater (or non–high-density lipoprotein cholesterol [non–HDL-C] levels ≥2.4 mmol/L or apolipoprotein B levels ≥0.7 g/L) (strong recommendation, moderate-quality evidence).[1] Lower concentrations of LDL-C are associated with a lower risk of atherosclerotic cardiovascular disease events; specifically, 1 randomized controlled trial (RCT) involving patients with recent ischemic strokes demonstrated a reduction in events in patients assigned lower LDL-C targets of less than 1.8 mmol/L compared with those given LDL-C targets between 2.3 and 2.8 mmol/L.[2] Ezetimibe or proprotein convertase subtilisin-kexin type 9 inhibitors in combination with statins reduce major cardiovascular events. Consider proprotein convertase subtilisin-kexin type 9 inhibitors for secondary prevention in a patient taking a maximally tolerated statin and with an LDL-C greater than 2.2 mmol/L, or ezetimibe if LDL-C is between 1.8 and 2.2 mmol/L. This recommendation aligns with the American Heart Association and American College of Cardiology 2018 guideline on the management of blood cholesterol.[3]

The CCS and the Canadian Heart Rhythm Society (CHRS) suggest the addition of a proton pump inhibitor (PPI) to decrease the risk of gastrointestinal adverse effects for patients with atrial fibrillation who require combination anticoagulant and antiplatelet therapy daily (weak recommendation, moderate-quality evidence).[4] There are no RCTs investigating the use of PPIs in patients with atrial fibrillation on oral anticoagulants. However, studies have shown benefits of PPIs for gastroprotection in elderly patients on acetylsalicylic 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 ACEI or angiotensin receptor blocker [ARB]); β-blocker; mineralocorticoid receptor antagonist; and sodium-glucose cotransporter-2 inhibitor (strong recommendation, moderate-quality evidence).[10] The previous guideline recommended using an ACEI as the first-line therapy and switching to an ARNI if the patient remained symptomatic on the targeted dose of the ACEI. Although the presence of symptoms is still an indication to start an ARNI, with recent studies showing superiority of ARNIs in the setting of HFrEF,[11,12] the guideline's authors now also recommend an ARNI as first-line therapy in hospitalized patients with HFrEF without previous exposure to either ACEIs or ARBs. Titrate all medications concurrently every 2 to 4 weeks with the goal of attaining targeted doses or maximally tolerated doses within 3 to 6 months of diagnosis. The 2020 guideline update recommended the addition of a sodium-glucose cotransporter-2 inhibitor to guideline-directed medical therapy for HFrEF.[13]

The Canadian Thoracic Society (CTS) has revised its definition of well-controlled asthma to refer to patients who experience daytime symptoms 2 or fewer days per week and need 2 or fewer reliever doses per week (strength of recommendation and quality of evidence not provided).[14,15] In previous guidelines the CTS had described good asthma control as fewer than 4 days per week of daytime symptoms or the need for fewer than

4 doses per week of fast-acting β-agonist.[14,15] Asthma control is more than symptom control and considers impact on quality of life, exacerbations, lung function, and inflammatory markers.[15] The changes in the 2021 guidelines align the CTS recommendations with the criteria seen in RCTs guiding treatment options[14] and with recommendations in other guidelines, such as those of the Global Initiative for Asthma (GINA)[16] and the Canadian Paediatric Society,[17,18] which define control as symptoms occurring on 8 or fewer days per month. Patients whose asthma is not well controlled should have their treatment escalated.[15]

The CTS and GINA recommend consideration of inhaled corticosteroid (ICS)–containing treatment in all patients with asthma, especially those at high risk of exacerbation (level B evidence provided in the GINA guideline).[15,16] The CTS recommends patients with very mild well-controlled asthma at higher risk for asthma exacerbation have ICS-containing treatment: either daily ICS and short-acting β-agonist as needed (all ages) or inhaled combined budesonide-formoterol as needed for symptoms (for patients 12 years and older).[15] Patients with higher risk include those with any history of severe exacerbation (requiring emergency department visits or oral corticosteroids); those with poorly controlled asthma; those who overuse short-acting β-agonists (more than 2 puffers per year); or those who currently are smokers.[15] For patients at low risk whose asthma is well controlled, ICS-containing treatment is also an option to improve control and decrease exacerbations.[15] Similarly, GINA recommends ICS-containing treatment as above for all patients with asthma, regardless of risk.[16] Note that including budesonide-formoterol as an option for reliever therapy is new to both guidelines.

The American Gastroenterological Association and the American Society of Colon and Rectal Surgeons recommend that selected patients with uncomplicated diverticulitis can be treated without antibiotics (strong recommendation based on high-quality evidence, level 1a).[19,20] New evidence suggests that diverticulitis is a multifactorial inflammatory reaction.[20] Recent studies have shown that antibiotic treatment results in no difference in outcomes among immunocompetent patients, including time to resolution, readmission, complications, or need for surgery, compared with those not treated with antibiotics.[19] Antibiotic treatment is advised in patients with complicated diverticulitis and in patients who have uncomplicated diverticulitis as well as comorbidities, frailty, refractory symptoms or vomiting, C-reactive protein levels greater than 140 mg/L, baseline white blood cell counts greater than 15×10^9/L, or fluid collection, as these factors increase the risk of progressing to complicated diverticulitis.[19]

The Association of Medical Microbiology and Infectious Disease Canada recommends that acute uncomplicated bacterial rhinosinusitis in adults be treated with only 5 to 7 days of antibiotics (strength of recommendation and quality of evidence not provided).[21] The previous rhinosinusitis guideline recommended a 10-day course of antibiotics.[22] One meta-analysis cited in the newer guideline showed that a duration of 3 to 7 days was as effective as a duration of 6 to 10 days, and a sensitivity analysis of 5 days versus 10 days of antibiotic treatment came to a similar conclusion.[23] This update aligns with the 2012 Infectious Diseases Society of America guideline, which recommends 5 to 7 days of antibiotics with a re-evaluation at 3 to 5 days to ensure improvement and no extension of infection.[24]

Conclusion

This article highlighting key recommendations in cardiac care, respiratory medicine, and gastroenterology is part 1 in a series of articles summarizing guideline updates from 2021. Family physicians are encouraged to appraise these recommendations and explore these updates to advance their knowledge or confirm their current clinical practices.

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Competing interests
None declared

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