

Detection and Management of Hyperlipidemia and Cardiovascular Disease Risk

Introduction

Cardiovascular disease is a leading cause of morbidity and mortality across all racial and ethnic populations in the United States.^{1,2} Hyperlipidemia is a significant risk factor for the development of CVD.³ Early detection and effective management of hyperlipidemia and CVD risk are critical to reduce the likelihood of adverse cardiovascular events. This supplement provides practical, evidence-based guidance that can help family physicians adopt a team-based, equitable care approach to address hyperlipidemia and primary CVD prevention and significantly improve their patients' cardiovascular outcomes.

CVD Risk Assessment

Family physicians should consider risk factors such as age, family history, tobacco use, hypertension, diabetes and obesity when assessing a patient's risk for hyperlipidemia. Current guidelines recommend using an estimate of the patient's 10-year risk for atherosclerotic cardiovascular disease as a starting point for clinician-patient conversations about risk-reducing strategies.^{4,5} This estimate can also help clinicians identify people with a higher CVD risk who may benefit from more aggressive preventive measures, including pharmacotherapy. Commonly used risk calculators include the American College of Cardiology's ASCVD Risk Estimator Plus (tools.acc.org/ASCVD-Risk-Estimator-Plus) and the American Heart Association's Predicting Risk of cardiovascular disease EVENTS (PREVENT™) (<https://professional.heart.org/en/guidelines-and-statements/prevent-calculator>).^{4,6}

A clinical practice guideline developed by the Department of Veterans Affairs and the Department of Defense states that it is reasonable to assess CVD risk every five years in patients aged 40 and older who are not on statin therapy and have not developed any new cardiovascular risk factors.⁵ Researchers have noted a need for more evidence regarding the optimal frequency of lipid testing for primary CVD prevention.⁵

CVD risk calculators can be helpful as part of a comprehensive approach to patient care but should not replace clinical judgment. When these tools are used to guide clinical decisions, it is important to consider individual patient factors, including their preferences. In

addition, while risk-based recommendations allow for more patient-centered discussions and treatment decisions, many calculators inappropriately include race or ethnicity as a factor in their calculations. If race is used as a proxy for biology or genetics in clinical evaluation and management, the true health status of a patient may not be accurately assessed.⁷ This can obscure the impact of factors like social determinants of health (SDOH) and systemic racism, and it can exacerbate racial health disparities.

Management Strategies for Hyperlipidemia LIFESTYLE INTERVENTIONS

Lifestyle modification is the cornerstone of hyperlipidemia management.^{4,8} Patients should be encouraged to adopt a heart-healthy diet rich in fruits, vegetables and whole grains, engage in regular physical activity and maintain a healthy weight. Family physicians should also talk to their patients about the importance of quitting smoking and limiting alcohol consumption. Lifestyle interventions are crucial for reducing low-density lipoprotein cholesterol levels and overall cardiovascular risk.^{4,9}

PHARMACOTHERAPY

Statins are the first-line pharmacotherapy for lowering LDL cholesterol and reducing cardiovascular events.^{4,10} If a patient does not achieve target lipid levels with statins alone, clinicians can consider adding ezetimibe or a proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor based on the patient's specific risk profile.^{3,11}

The Centers for Disease Control and Prevention offers information for patients about cholesterol-lowering medications at www.cdc.gov/cholesterol/treatment/cholesterol-lowering-medicines.html.

MONITORING AND FOLLOW-UP

Monitoring lipid levels can help family physicians evaluate the effectiveness of lifestyle interventions and pharmacotherapy and ensure patient adherence to prescribed therapies.^{8,12} Appropriate follow-up visits should be scheduled to adjust the treatment plan if needed and address any new barriers to medication adherence (e.g., side effects, financial constraints).¹³

Team-Based Approach to Care

A team-based approach to care is vital for detecting and managing hyperlipidemia and CVD risk.⁴ By fostering clear, regular communication and strong collaboration among multidisciplinary care team members (e.g., nurses, dietitians, pharmacists, subspecialists), family physicians can facilitate cohesive, patient-centered care that optimizes outcomes. Care teams can streamline health care delivery and ensure patients receive timely interventions by using electronic health records and clinical decision support tools to incorporate hyperlipidemia and CVD risk detection and management protocols into their workflow.

Family physicians are ideally suited to lead and coordinate care teams because they have a comprehensive understanding of their patients' overall health and provide continuity of care. Their ongoing relationships with patients enable them to tailor interventions to each patient's needs, address potential barriers to adherence, and provide care that shows cultural humility and resonates with diverse populations.

Talking to Patients About Hyperlipidemia and Cardiovascular Disease Risk: A Conversation Guide (www.aafp.org/family-physician/patient-care/clinical-recommendations/clinical-guidance-hypertension.html#highcholesterol) was created by the AAFP to facilitate shared decision-making in clinician-patient discussions about hyperlipidemia and CVD prevention.

Health Disparities: Recognition and Mitigation

It is essential to implement strategies that ensure equitable access to CVD risk assessment and management for all patients, regardless of socioeconomic status, race or ethnicity. Health disparities in hyperlipidemia and CVD are well documented.¹⁴⁻¹⁶ Populations that have been historically marginalized and under-resourced often experience worse outcomes due to a complex interplay of SDOH and systemic racism. Factors including socioeconomic status, access to health care and neighborhood environment significantly impact people's ability to access preventive services, adhere to treatment plans and maintain overall cardiovascular health.¹⁷

Family physicians often serve as patients' first point of contact and can play a critical role in mitigating health disparities.¹⁸ Their insight into the broader context

of a patient's life allows them to tailor interventions that go beyond clinical care, connect patients with needed community resources, and provide culturally and linguistically appropriate education. In addition, family physicians can advocate for policy changes that improve access to care.

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