American Journal of Preventive Cardiology 17 (2024) 100628

Contents lists available at ScienceDirect

American Journal of Preventive Cardiology

journal homepage: www.journals.elsevier.com/american-journal-of-preventive-cardiology

Commentary

NLA/ASPC response to the USPSTF recommendation statement on screening lipid panel in children and adolescents

Anne Carol Goldberg [a], Daniel Soffer [a], Christe Ballantyne [a], Martha Gulati [b,*], Michael Shapiro [b]

[a] National Lipid Association (NLA), United States
[b] American Society for Preventive Cardiology (ASPC), 127 S. San Vicente Blvd, Suite A3600, Los Angeles, CA 90048, United States

Dear members of USPSTF writing team and administration,

We are writing to reiterate our concerns and observations concerning the recent United States Preventive Services Task Force (USPSTF) Final Recommendation Statement on Lipid Disorders in Children and Adolescents: Screening [1]. This statement was unnecessary and potentially harmful to the population. USPSTF standards require an unreasonable level of evidence to demonstrate the obvious, which is that identification of a common inherited condition with population screening will enable early treatment and prevention of serious outcomes decades later and is superior to the alternative of hopeful screening of adults who already have advanced disease from the untreated condition.

For symptomatic children and adolescents 20 years or younger, "the USPSTF concludes that there is insufficient evidence to assess the balance of benefits and harms of screening for lipid disorders in children and adolescent 20 years or younger." This has not changed from previous recommendation statements [2]. The National Lipid Association (NLA) twice submitted comments during the review process, indicating that there are substantial data that screening for and treating children and adolescents with familial hypercholesterolemia (FH) produces significant benefit. The evidence includes surrogate markers, such as carotid intimal media thickness, as assessed in a placebo-controlled statin trial in children with FH who are 8 to 18 years of age [3]. In addition, registry data have shown substantial benefits in treatment, with treated offspring of parents with FH having almost no cardiovascular events compared to their parents who were not treated from a young age [4].

The NLA and the American Society for Preventive Cardiology (ASPC) strongly support the recommendations of the National Heart, Lung and Blood Institute and the American Academy of Pediatrics on universal cholesterol screening in children and adolescents, as well as the NLA's previous recommendations on the screening, diagnosis, and treatment of FH [5]. We are concerned that this updated recommendation, which retains the indeterminate status for screening, will discourage clinicians from screening children and adolescents. Many groups recommend universal screening [6–9] given that the incidence of FH is approximately 1 in 200 to 300 people [8] and leads to lifelong elevated LDL-cholesterol levels and increased risk for cardiovascular disease [8]. The widespread dissemination of the USPSTF recommendation is likely to confer harm in that many young people who could benefit from treatment will not be diagnosed or treated.

In light of the clear need to identify vulnerable individuals at-risk and ensure accurate diagnosis and treatment of FH, any disruption to the national guideline-directed screening recommendations is deemed potentially harmful. We suggest refraining from future reviews of this issue unless an aspirational trial to the standards set by the USPSTF is accomplished. Our organizations would be happy to assist in such an endeavor.

Thank you for considering our request and observations.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

[1] https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lipid-disordersin-children-screening. Accessed 7 Aug 2023.
[2] Archived: lipid disorders in children and adolescents: screening | United States preventive services taskforce (uspreventiveservicestaskforce.org). Accessed 7 Aug 2023.
[3] Wiegman A, Huten BA, de Groot E, Rodenburg J, Bakker HD, Büller HR, et al. Efficacy and safety of statin therapy in children with familial hypercholesterolemia. JAMA 2004;292(3):331–7.
[4] Versmissen J, Oosterveer DM, Yazdanpanah M, et al. Efficacy of statins in familial hypercholesterolaemia: a long term cohort study. BMJ 2008;337:a2423.
[5] Goldberg AC, Hopkins PN, Tosh PP, et al. Familial Hypercholesterolemia: Screening, diagnosis and management of pediatric and adult patients Clinical guidance from the national lipid association expert panel on familial hypercholesterolemia. JCL 2011;5:133–40.
[6] Urh Groselj and others, screening in children for familial hypercholesterolaemia: start now. Eur Heart J 2022;43(34):3209–12. https://doi.org/10.1093/eurheartj/ehac224.

* Corresponding author.
E-mail address: Martha.Gulati@cshs.org (M. Gulati).

https://doi.org/10.1016/j.ajpc.2023.100628

Available online 7 December 2023

[7] Gidding SS, et al. Paediatric familial hypercholesterolaemia screening in Europe: public policy background and recommendations. Eur J Prev Cardiol 2022;29(18): 2301–11. https://doi.org/10.1093/eurjpc/zwac200.
[8] Representatives of the Global Familial Hypercholesterolemia Community, Wilemon KA, Patel J, Aguilar-Salinas C, et al. Reducing the clinical and public health burden of familial hypercholesterolemia: a global call to action. JAMA Cardiol 2020; 5:217–29.
[9] Ademi Z, Norman R, Pang J, Liew D, et al. Health economic evaluation of screening and treating children with familial hypercholesterolemia early in life: many happy returns on investment? Atherosclerosis 2020;304:1–8.