Test Lp(a) Levels to Inform ASCVD Management

Lipoprotein (a) levels should be measured in clinical practice to refine risk prediction for atherosclerotic cardiovascular disease (ASCVD) and inform treatment decisions, even if they cannot yet be lowered directly, recommends the National Lipid Association (NLA) in a scientific statement.

The statement was published in the *Journal of Clinical Lipidology* on August 2022.

The question in the scientific community is: What role does that particular biomarker play in terms of causing serious heart disease, stroke, and calcification of the aortic valve? It actually can contribute and or cause any of those conditions. This has been confirmed in meta-analyses of prospective, population-based studies showing a high risk for MI, coronary heart disease, and ischemic stroke with high Lp (a) levels.

The thing that's then sort of problematic is that we don't have a specific treatment to lower" Lp (a). There are nevertheless several drugs in phase 2 and 3 clinical trials that appear to have the potential to significantly lower Lp (a) levels. Increased Lp (a) levels are recognized as being on a continuum in terms of their risk, such that there is no level at which raised concentrations can be deemed safe.

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Artificial Sweeteners Linked to Higher CV Event Risk

Health concerns about the consumption of artificial sweeteners could be strengthened with the publication of a new study linking their intake to increased risk of heart disease and stroke events. In this latest large-scale, prospective study of French adults, total artificial sweetener intake from all sources was associated with increased risk overall of cardiovascular and cerebrovascular disease.

The study was published in the *BMJ* on September 2022.

The current study differs from those done previously in that it includes artificial sweetener intake from both food and drinks, whereas previous studies have focused mainly on artificial sweetener content of beverages alone. Just over half of the artificial sweetener intake in the study came from drinks, with the rest coming from tabletop sweeteners and foods.

There is mounting evidence correlating artificial sweeteners to weight gain and heart disease. The advice would be that we all need to try to limit sugar intake, but we should not consider artificial sweeteners as safe alternatives. Rather, we need to try to reduce our need for a sugary taste in our diet.

Risk Increased by 9%

The current study included 103,388 French adults from the NutriNet-Sante cohort, of whom 37.1% reported consumption of artificial sweeteners. The sweeteners assessed were mainly aspartame (58% of sweetener intake), acesulfame potassium (29%), and sucralose (10%), with the other 3% made up of various other sweeteners including cyclamates and saccharin. Results showed that over an average 9 years follow up, artificial sweetener intake was associated with a 9% increased risk of cardiovascular or cerebrovascular events, including myocardial infarction, acute coronary syndrome, angioplasty, angina, stroke, or transient ischemic attack, with a hazard ratio of 1.09 (95% CI, 1.01 to 1.18; $P = .03$).

The average intake of artificial sweeteners among those who reported consuming them was 42.46 mg/day, which corresponds to approximately one individual packet of tabletop sweetener or 100 mL of diet soda.

Going to Medical Conferences Has Similar COVID Risk to Staying Home: Study

As COVID rates continue to decline globally and across the United States, many professional healthcare associations are gradually resuming in-person meetings. This is despite the increasing number of online meetings and the shift in dynamics from physical sessions to virtual conferences during COVID lockdown restrictions.

Although few studies have found that COVID case numbers are high after general mass meetings, information on viral transmission rates after such in-person meetings are often limited, unpublished, and unreliable — at best.

A study published September 2022 in *JAMA Network Open* compared COVID rates among in-person attendees and virtual attendees of the Academic Surgical Congress — the largest surgical society meetings in the United States. The conference, which was held in Orlando, Florida, on February 1, shortly after the peak of the Omicron wave, gave participants the option of in-person or virtual attendance.

This study is the first to assess COVID-19 rates after a large in-person meeting of healthcare workers. There have been anecdotal reports of transmission at other meetings but no large-scale evaluations of risk of transmission with attendance at a medical conference. Clarke's team recruited registrants for a survey assessment of COVID testing and symptoms 7 days after the meeting. The researchers collated data from anonymous surveys and evaluated differences in positivity rates between virtual and in-person attendees.

During the meeting, steps to prevent COVID transmission included encouraging self-testing, mandatory vaccination and masking, and the serving of food and beverages outdoors.

Concerning the efficacy of COVID-specific measures, It is difficult to prove that the measures were effective at reducing transmission because authors don't know what the rates would have been if the measures were not in place. However, the data is suggestive that the evidenced-based preventative measures implemented by the meeting organizers were effective at keeping transmission rates low, and in-person attendance at the conference did not increase the risk of contracting COVID.

'Game Changer' Semaglutide Halves Diabetes Risk From Obesity

Treatment of people with obesity but without diabetes with the glucagon-like peptide-1 (GLP-1) agonist semaglutide (Wegovy) hailed at its approval in 2021 as a "game changer" for the treatment of obesity led to beneficial changes in body mass index (BMI), glycemic control, and other clinical measures.

This collectively cut the calculated risk for possible future development of type 2 diabetes in study participants by more than half, based on post-hoc analysis of data from two pivotal trials that compared semaglutide with placebo. The findings suggest that semaglutide could help prevent type 2 diabetes in people with overweight or obesity.

GLP-1 Agonists as Complication-Reducing Agents

Finding a link between treatment with semaglutide and a reduced future risk of developing type 2 diabetes is important because it shows that this regimen is not just a body mass index (BMI)-centric approach to treating people with obesity, but is also a way to potentially reduce complications of obesity such as diabetes onset, explained Garvey, a professor and director of the Diabetes Research Center at the University of Alabama at Birmingham.

Having evidence that treatment with a GLP-1 agonist such as semaglutide can reduce the incidence of diabetes in people with obesity might also help convince payers to more uniformly reimburse for this type of obesity intervention, which up to now has commonly faced coverage limitations.

European Association for the Study of Diabetes 2022 Annual Meeting.