Three of the four SNPs, rs10919071 (ATP1B1), rs17779747 (KCND2), and rs3864180 (GPC5), were found to be significantly associated with SCD/CA only in patients with prior HF. The other SNP, rs876188 (C14orf64), was associated in patients without HF. The results of this study suggest that genetic influence on SCD/CA following an ACS event can vary depending on presence or absence of heart failure.

4. Relationships between the QTc interval and cardiovascular, stroke, or sudden cardiac mortality

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J Cardiol. 2014 Jul. doi: 10.1016/j.jcc.2014.05.008. [Epub ahead of print]

In a recent study published in Journal of Cardiology, researchers of JMS Cohort Study found a linear relationship between the QTc interval and mortality has also shown a marginal increase with an increase in QTc interval. The risk of stroke mortality in Japanese population increases progressively with the QTc interval. The risk of SCD, on the other hand, followed a J-shaped relationship with the Bazett QTc interval quartile. The study concluded that the risk of cardiovascular and stroke mortality in Japanese population increases progressively with the QTc interval, while the mortality risk due to SCD exhibits a J-shaped relationship with the same variable.

1. Stress-prone women can benefit from maintaining a sleep and exercise pattern

Maintaining sleep and exercise patterns may have a strong impact on modifiable 10-year cardiometabolic risk for women prone to work-related stress and sleep deficiency, a recent study published in American Journal of Industrial Medicine has claimed.

In the study, the researchers collected data from 99 patients care workers who were suffering from job stress, physical activity, night work, and sleep deficiency. The objective was to estimate 10-year cardiometabolic risk at follow-up. A multivariate linear regression model was built based on significant associations between baseline measure and outcomes. The results show that having sleep maintenance problems, a different occupation than nursing, and/or not exercising at recommended levels at baseline increased the 10-year cardiometabolic risk.


2. Clarithromycin associated with increased risk of cardiac death

A population-based Danish cohort study suggested that clarithromycin can significantly increase the risk of cardiac death. The study also evaluated roxithromycin for the same outcome, and found no association of it with risk of cardiac death.

The observational study was carried out in Danish adults (aged 40-74) who received seven treatment courses with clarithromycin (n=160,297), roxithromycin (n=588,985), and penicillin V (n=4,355,309). During treatment with clarithromycin, patients, especially women, had an increased risk of cardiac death compared with those who were receiving penicillin V for similar infections. No increased risk was found with roxithromycin.

Although this study, being an observational one, alone cannot confirm the association between clarithromycin and cardiac death, it definitely calls for further investigation in this field, as clarithromycin is one of the most commonly prescribed antibiotic in many countries. However, the researchers think that the impact this finding on current prescribing practice is limited, and recommends clinicians to wait for confirmation of the findings before changing their prescribing habits.


3. Active commuting lowers BMI and body fat

A recent study published in the BMJ suggests, reinforcing earlier claims, that active commuting (walking or cycling and using public transport) can reduce BMI and percentage of body fat. According to researchers, one key finding of this study is that using public transport was shown to be as good as cycling or walking for reduction of body fat.

The study involved 7534 subjects who were assessed for BMI and 7424 subjects who were assessed for percentage of body fat. In fully adjusted models, men who used public transit or who walked or cycled to work had 1.10 and 0.97 points lower BMI scores than men who used private transport. For women, the reduction is BMI scores were 0.72 and 0.87 points, respectively. Results for percentage body fat reduction were similar.

Though the study participants were not asked exactly how much walking was involved in their public transport, the authors assume that people who use public transport as their main mode of getting to work also do some walking, so they engage in incidental activity as part of that journey, which doesn’t happen with people who drive to the office.

The authors suggest healthcare professionals to encourage patients to “leave their cars at home”, as they conclude that this will improve their patients’ health in short and well as in long term.

Sources: Associations between active commuting, bodyfat, and body mass index: population based, cross sectional
involved 10,000 men who were followed from 1968

4. Consumption of probiotic can improve blood pressure

The results from a meta-analysis showed that consuming probiotics may lead to a modest but significant reduction of both systolic and diastolic blood pressure. The study was published in Hypertension, a journal published by AHA, on July 2014.

The researchers chose nine randomized, controlled trials for the meta-analysis. Overall, the results showed that consuming probiotics could significantly reduce SBP and DBP by 3.56 and 2.38 mm Hg, respectively. The results of this study fall in line with earlier findings. A greater reduction was found with multiple compared with single species of probiotics, for both systolic and diastolic BP. Subgroup analysis of trials with baseline BP ≥130/85 mm Hg found a more significant improvement in diastolic BP.

These results propose probiotics as potential supplement and dietary constituent to improve blood pressure and prevent or control hypertension. The BP reduction found in the study was modest, but can still be very important for overall improvement of public health and cardiovascular consequences.


6. Statin therapy linked with increased risk of diabetes

The risk of new-onset diabetes increases with an increased adherence to statin therapy, researchers of a new study has claimed. The cohort study, carried out in Italy, comprised 115,709 subjects who were newly treated with statins during 2003 and 2004. Statin adherence was measured by the proportion of days covered (PDC) with statins. During the observational period, 11,154 cohort members were diagnosed with type II diabetes. Compared with patients with very low adherence, those with intermediate and high adherence to statin therapy had higher hazard ratios.

The benefits of statins in reducing cardiovascular events seem to overwhelm its risks of developing diabetes, the researchers of the study suggest. This study sheds light on a very less explored area of long-term risks associated with continued statin therapy, and definitely calls for extensive independent research.


Sources:
