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Oral Presentations

1
CORONARY MICROVASCULAR DYSFUNCTION IS ASSOCIATED WITH CBIN1 SCORE (CS) – INSIGHTS FROM THE WOMEN'S ISCHEMIA SYNDROME EVALUATION – CORONARY VASCULAR DYSFUNCTION (WISE-CVD) CONTINUATION STUDY

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BACKGROUND: Coronary microvascular dysfunction (CMD), diagnosed by invasive coronary reactivity testing (CRT), is frequent in women with evidence of ischemia with non-obstructive coronary artery disease (INOCA), and may progress to heart failure with preserved ejection fraction (HFpEF). CS is a cBIN1 Score determined from plasma levels of cardiac origin cBIN1 protein which regulates cardiomyocyte calcium handling. A high CS indicates low cardiac muscle cBIN1, which is observed in both HFpEF and HFrEF. It is unknown whether CS is a useful biomarker for CMD.

METHODS: In 51 women with INOCA undergoing CRT, we measured intracoronary adenosine-mediated coronary flow reserve (CFR) (abnormal<2.5), vasodilation to nitroglycerin (abnormal<20%), reflecting non-endothelial-dependent pathways, and change in coronary blood flow (ΔCBF) to acetylcholine (Ach) (abnormal<50%) and vasodilation to Ach (abnormal<10%), reflecting endothelial-dependent pathways. CS represents the natural log of plasma cBIN1's normalized reciprocal, with CS $\geq$1.0 being associated with poor myocyte health.

RESULTS: Women were 55$\pm$11 years; 38% were hypertensive, 20% hyperlipidemic, 22% with smoking history, 8% diabetic, with preserved LVEF (mean 62$\pm$6%). CS correlated with less coronary dilation to Ach (r=-0.43, p=0.011) and there was a trend for correlation with ΔCBF (r=-0.30, p=0.086), but not CFR or nitroglycerin. CS $\geq$1.0 demonstrated limited sensitivity (46.2% and 48.0%) but high specificity and positive predictive value (PPV) for endothelial-dependent dysfunction (specificity 88.9% and 87.5%, respectively; PPV 92.3%, for both).

CONCLUSION: In women with INOCA, CS is related to endothelial-dependent CMD. Further research is needed to determine whether endothelial-dependent CMD plays a mechanistic role in HFpEF progression.

2
GENDER AND TOBACCO MARKETING IN SOCIAL MEDIA: HOW CELEBRITY SMOKING CULTURE IS CONVEYED AND PERCEIVED BY YOUNG WOMEN

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BACKGROUND: Tobacco use remains a leading cause of death and disability in Canada and a key risk factor for heart disease. There are many restrictions on tobacco marketing to protect youth and vulnerable groups from tobacco promotion. However, digital and social media is a new and unrestricted marketing avenue for the tobacco industry. Many young women use social media to stay informed about entertainment and celebrity lifestyles. This study looked at tobacco and smoking imagery among celebrities on social media and the marketing tactics or influence on young women.

METHODS: Data was collected by using a purposeful sample to analyze celebrity Instagram profiles. A thematic analysis was conducted with a focus on gender related concepts to assess social media marketing tactics of celebrities. Semi-structured key-informant interviews were conducted with young adult women to ascertain impressions of celebrity smoking culture on Instagram.

RESULTS: Celebrities are promoting tobacco use through social media. Many of the celebrities had portrayals of tobacco use embedded within their profiles. Young females were particularly targeted with themes such as high-fashion, glamour, sex appeal, fun, and rebellion. The themes outlined were also identified by key informants, who perceived celebrity use of tobacco on social media as an effective way to promote smoking behaviours in young women.

CONCLUSION: These findings highlight the need for interventions to monitor and restrict tobacco related marketing on social media and continue smoking prevention and education programs for youth. Celebrities should be aware and held responsible for the imagery they share over social media.

3
SEX DIFFERENCES IN THE INCIDENCE AND OUTCOMES OF NEWLY DIAGNOSED ATRIAL FIBRILLATION-RELATED STROKE

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BACKGROUND: High rates of previously undiagnosed atrial fibrillation (AF) have been reported at the time of hospital