PP-OL-09

THE ASSOCIATION BETWEEN BETEL QUID CHEWING AND METABOLIC SYNDROME AMONG URBAN ADULTS IN THE MANDALAY DISTRICT OF MYANMAR

https://doi.org/10.15605/jafes.037.AFES.102

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INTRODUCTION
As the prevalence of the metabolic syndrome, obesity and diabetes increases worldwide, the need to identify modifiable lifestyle risk factors increases, especially those that may be relatively unique to a specific population.

To explore a possible association between betel quid chewing and metabolic syndrome (MS).

METHODOLOGY
This was a community-based cross-sectional study done in Dhamma Hall, a Buddhist temple. Participants were 391 adults residing in the Chan Aye Thar Zan Township in the Mandalay District of Myanmar. We interviewed the subjects and measured their triglycerides, HDL-Cholesterol (HDL), glucose, waist circumference, body mass index and blood pressure. The main outcome measures were betel quid chewing status and the presence of MS. Other risk factors for MS (age, sedentary lifestyle, family history of DM, hypertension, and cardiovascular disease, and risk factors for non-communicable disease such as sex, smoking, alcohol use), were adjusted through multivariate regression analysis.

RESULTS
The prevalence of MS was similar in chewers (n=182) and non-chewers, at about 50%. After controlling for other factors, the predictors for development of metabolic syndrome among betel chewers was the daily number of quids (Adjusted OR 1.47, CI 1.10- 3.30), age 40 years and older (AOR 2.23, CI 1.28 – 3.92), family history of hypertension (AOR 0.38, CI 0.21- 0.68), and family history of diabetes (AOR 0.10, CI 0.03- 0.32).

CONCLUSION
Betel quid chewing may represent a behavioral lifestyle target for approaches to reduce the incidence of metabolic syndrome.

PP-OL-10

EFFECTS OF GELESIS200, AN ORAL SUPERABSORBENT HYDROGEL, ON POSTPRANDIAL INSULIN RESPONSE IN PEOPLE WITH PREDIABETES: AN ANALYSIS OF THE LIGHT-UP STUDY

https://doi.org/10.15605/jafes.037.AFES.103

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OBJECTIVE
Postprandial hyperinsulinemia is associated with beta-cell dysfunction and development of type 2 diabetes. This analysis assessed the effect of Gelesis200 (GS200), an investigational oral superabsorbent hydrogel, on postprandial glucose and insulin response among people with prediabetes, in the LIGHT-UP study.

METHODOLOGY
The LIGHT-UP study investigated the safety and efficacy of GS200 vs. placebo over 25 weeks in 254 participants with prediabetes or type 2 diabetes and a body mass index of 27-40 kg/m^2. The analysis included participants with prediabetes who completed a 2-hr oral glucose tolerance test at baseline and at Week 25 (42 participants per arm). Plasma glucose and serum insulin were measured at 15–30-minute intervals. Area under the curve (AUC) was calculated using the trapezoidal method and differences were assessed using ANCOVA model with weight loss as a covariate.