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Emerging role of protein kinase Cbeta in the development of diet-induced obesity and diabetes

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Although the interplay of excessive food intake, physical inactivity, and genetic susceptibility underlies most cases of obesity, the signals and mechanisms that trigger fat accumulation by disrupting energy homeostasis are not well understood. The startling rise in the number of people who are obese, together with the inability of most individuals to comply with treatment regimens that require sustained lifestyle changes, has stimulated efforts to identify new therapeutic targets for the treatment and prevention of this pervasive disorder. One potential new target is PKC β . We describe different aspects of PKC β activation and adipose dysfunction and propose a mechanism for how these aspects may be inter-related and might play a crucial role in the pathogenesis of obesity and related metabolic abnormalities. Emerging evidence suggests that disruption of the PKC β /p66^{shc}/mitochondrial axis leads to disturbances in adipose mitochondrial dysfunction, adipocyte hypertrophy, oxidative stress, and inflammation within the adipose tissue, which may result in obesity and insulin resistance. PKC β repression appears to be an important component of the beneficial metabolic response to exercise. The above data led us to hypothesize that PKC β is part of the body's program to conserve all extra calories as fat against a time when calories might be scarce, but in the current prevailing situation of overeating and a sedentary lifestyle the enzyme actually provides a survival disadvantage. The above studies have clearly advanced our understanding of the role of PKC β in energy homeostasis; however, there are still many unanswered questions concerning the precise cascade of events that link PKC β activation with the development and progression of adipose tissue dysfunction. Large-scale prospective human studies are also required to confirm the data from animal models and establish PKC β as a potential therapeutic target for the treatment of obesity and related syndromes.

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Foot care pattern among diabetic patients in Almadinah Almunawwarah

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To determine the foot care pattern among diabetic patients identified in the community through random screening in relation to symptoms and signs.

A total number of 899 adult volunteer subjects were invited to participate in a campaign "your health is your life", created by Taibah medical club between April 24th 2014 till May 2nd 2014. All subjects screened for diabetes through testing for HbA1c. We enquired about knowledge and practice of foot care, the Michigan neuropathy screening instrument and diabetic neuropathy symptom score. Unsteadiness in gait is assessed as well. Patients who were found to have distal symmetrical polyneuropathy on examination were tested further using Neuropad. Results:(Mean \pm Standard deviation). HbA1c $8\pm 2.1\%$. BMI was 31.7 ± 8.9 and waist circumference $80.9\pm 18\text{cm}$. 101 subjects of total subjects included in the campaign have type 2 diabetes mellitus. 9% of total diabetic subjects did not know they have Type2DM and it was discovered during the campaign. Although all of diabetic patients wash their feet daily only 42% dry between the toes after washing. Moreover, only 27% of all diabetic patients inspect their feet for lesions either daily or several times per week while 55% will inspect their feet only if they suspect they have a problem. On examination 45% of total diabetic patients had neuropathy and almost of the newly diagnosed diabetic patients in the campaign were found to have diabetic neuropathy. We conclude the importance of induction of patient education campaign to care for feet to prevent ulcer formation in a diabetes prevalent population of Saudi Arabia.

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