Journal Club

Marijuana Use and Diabetes Mellitus

Somchai Bovornkitti MD, Hon.FRCPE, Hon.MRCP, FRCP, FRACP, Hon.FACP Fellow of the Academy of Science, The Royal Society, Thailand

The use of marijuana is likely to increase in Thailand because of the trend towards increased decriminalization and legalization. Common method of ingesting marihuana is inhalation, either by smoking or vaporizing. Less common methods are oral, sublingual, and topical administration.

There is a plausible link between marihuana use and type 2 diabetes mellitus due to the known effects of cannabinoids on adipose tissue and glucose/insulin metabolism. The delta-9-tetrahydrocannabinol cannabinoid produces almost all of the specific pharmacological effects most notably the well-known psychoactive effects.

Obesity is a major risk factor for the development of diabetes mellitus. Metabolic dysregulation and metabolic syndrome may precede the development of overt diabetes mellitus. Current marijuana users exhibited higher dietary caloric intake and differing patterns of nutrient intake than non-current marijuana users. In the face of this background which supports the role of cannabinoids in promoting appetite and weight gain, a number of studies have examined the association of marijuana use to BMI and obesity. A prospective study of 7233 women, and their offspring who have been followed for 21 years, with measurement of body weight and questionnaire of health, sociodemographic factors, and lifestyle. The prevalence of overweight or obesity was inversely associated with cannabis use. Other studies have shown a negative association between marijuana use and BMI. The majority of the reviewed studies showed marijuana use to be associated with lower BMI.

Document used in the preparation of this short communication:

1. Sidney S. Marihuana Use and Type 2 Diabetes Mellitus: a Review. *Curr Diab Rep* 2016:16:117-22.