



COMMENTARY

Internal medicine related to Diabetes Medicine

Catherine Kafe\*

Department of Internal Medicine, Oxford University, Italy

Corresponding Author: Catherine Kafe, E-mail: [kafecatherine@unibo.it](mailto:kafecatherine@unibo.it)

INTRODUCTION

The constant boom of sufferers with kind 2 diabetes mellitus (T2D) withinside the Republic of Kazakhstan during the last decade shows the want to broaden a software for the prevention of T2D.

Discovery of the affiliation of some of polymorphic markers of candidate genes with the improvement of T2DM facilitates us apprehend the ethnic variations withinside the chance of diabetes and the interactions among gene and surroundings that underlie T2DM, and additionally offer new records at the medical usefulness of genetic factors.

Carriage of diverse mixtures of genetic polymorphisms can also additionally provide an explanation for the medical heterogeneity of this disease. Currently, it's far believed that genetic markers related to the lipid profile, frame mass index (BMI) and glycemic tendencies boom the accuracy of the analysis of T2DM. It is widely recognized that disease-associated polymorphisms can also additionally display variations in ethnic groups, and therefore, those SNPs may be taken into consideration as particular for a given population. The affiliation among the genetic markers of sure genes and the metabolic parameters of T2DM has been drastically studied in diverse populations.

The motive of this observe is to investigate the affiliation of the SNPs with biochemical and anthropometric parameters of T2D in representatives of the Kazakh population.

Subjects of T2DM organization have been sufferers in Kazakhstan. The prognosis of T2DM amongst sufferers become installed according with the standards of the World Health Organization (WHO), fasting blood glucose <7.zero mmol/l. The observe concerned 139 sufferers (ninety two men (66.1%) and forty seven women (33.eight%)) common age (57 ± 9.71), 57.14 ± eight.fifty six and 59.25 ± 7.7, respectively. The manipulate organization become decided on from amongst volunteers, and people who visited the sanatorium for a normal scientific examination. The parameters for inclusion withinside the manipulate have been as follows: age ≥ 35 years, fasting glucose <7.zero mmol, according with WHO standards. The manipulate organization become represented through one hundred participants (forty six men (forty six%) and fifty four women (fifty four%)), common age (fifty four.05 ± eight.51), 52.18 ± 7.34 and 55.ninety

two ± 9.68, respectively. Sampling on this observe become primarily based totally on questionnaire effects, have been ethnically homogeneous, and covered best the population. Written knowledgeable consent become acquired from every participant. The observe become accepted through the Local Ethics Commission.

The biochemical (overall cholesterol, LDL, HDL, glucose and HOMA-IR index) and anthropometric signs have been evaluated.

The studies fabric become represented through samples of genomic DNA extracted from the peripheral blood of the topics the usage of the PurLinkGenomic DNA MiniKit reagent kit (Invitrogen, USA) according with the protocol.

SNP choice become primarily based totally at the Genome-extensive affiliation studies (GWAS) catalog. SNP applicants have been decided on primarily based totally on the subsequent considerations: SNPs that have been related to T2DM withinside the Kazakh sampling and confirmed excessive statistical values, displaying  $p \leq 0.05$  in a preceding observe wherein the importance of variations withinside the distribution of genotypes become zero.02.

Statistical processing of the effects become executed the usage of the software program package: MS Office Excel 2013, STATISTICA v. 6.zero. Differences have been taken into consideration substantial whilst  $p \leq 0.05$ .

Immuno-detection of mobile protein extracts Mouse lungs have been dissected, washed in CMF buffer (137 mM NaCl, 2.7 mM KCl, eight mM Na<sub>2</sub>HPO<sub>4</sub>, 1.five mM KH<sub>2</sub>PO<sub>4</sub>, five.five mM glucose) and homogenized, 10 strokes of pestle A and 10 strokes of pestle B in a Dounce homogenizer, in lysis buffer [1 M sorbitol, 10 mm HEPES (pH 7.5), 5 mm EDTA, 0.25 M NaCl, 0.2 % Triton X-100, 0.2 % NP40 and complete protease inhibitor mixture (Roche Applied Science)]. After 30 min incubation on ice with vortex, the protein extracts have been cleared through spin-down, and a fashionable PAGE loading buffer supplemented with 2% SDS become added. Samples have been incubated at sixty five oC for 15 min and subjected to 12 % SDS PAGE. Immunodetection of mobile proteins become finished through western blotting in accordance to conventional procedures. Antibodies used for western blotting covered anti-cleaved Cas-3, Katushka, antiphospho-SAPK/JNK, anti-phospho-ERK (Cat#9251S

and Cat#9101S, Cell Signaling Technology, USA) and anti-actin (Cat#ab180, Abcam, Cambridge, United Kingdom). Incubation with peroxidase-coupled secondary antibodies (Sigma-Aldrich, USA) become accompanied through the improved chemiluminescence detection procedure (Amersham, Bucks, UK).

**ACKNOWLEDGEMENT**

None

**CONFLICTS OF INTEREST**

Author declare that there is no conflict of interest