Editorial note on Metabolic syndrome

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Editorial Note

One of the most common causes of atherosclerotic vascular disease and type 2 diabetes is metabolic syndrome (MS) (Type-2 DM). Metabolic syndrome is characterised by abdominal obesity, insulin resistance, high blood pressure, and lipid disorders. The metabolic syndrome's prevalence rises with age and body weight, as well as through populations studied at the same time. The prevalence of metabolic syndrome is 27 percent in the United States, and the prevalence of metabolic syndrome is growing faster in women. In Turkey, metabolic syndrome affects 38% of the population.

The metabolic syndrome is a grouping of metabolic risk factors for heart disease and insulin resistance. Recently, a simple, fast, non-invasive, and realistic screening method was created to identify people who are at high risk of developing type-2 diabetes in the future. The Finnish Type-2 Diabetes Risk Score (FINDRISC) is one of these methods that has been commonly used and validated for detecting unknown diabetes and MS in a variety of populations, mainly Caucasian. Type-2 diabetes and cardiovascular disease diagnosis is overdue, and complications are unavoidable.

Individuals with a BMI of 25 kg/m^2 should be searched from a younger age and more regularly for individuals with one or more risk factors who are not pregnant, regardless of age. Vitamin D is a steroid-hormonal complex that controls calcium homeostasis and is involved in endocrine, autocrine, and paracrine processes. Cell dysfunction and insulin resistance have been linked to vitamin D deficiency. High vitamin D levels have been linked to an increased risk of metabolic syndrome, as well as low vitamin D levels in obesity and insulin resistance in patients with metabolic syndrome. Just one previous study found a connection between 25-(OH)-D3 levels and FINDRISC in people with and without obesity. We wanted to see if there was a connection between FINDRISC score and metabolic syndrome, vitamin D, insulin resistance, lipids, and systolic and diastolic stress in this research. The research included patients who submitted to the internal medicine polyclinic between January and October 2016. The research excluded patients with diabetes, asthma, thyroid disease, pregnancy, children under the age of 18, and those taking medications that impair vitamin D and calcium metabolism.

There are nine male patients. The men were fired from their employment. Since there were not enough male patients to make a statistically meaningful difference. A total of 115 female patients were enrolled in the study. Diagnosis of Metabolic Syndrome Adult Treatment Panel III (ATP III)-2001, Metabolic glucose) 110 mg/dL, according to the National Cholesterol Education Program (NCEP).

Age, BMI, waist circumference (WC), physical activity, daily consumption of vegetables and fruits, antihypertensive drug use, and personal history of patients were scanned with the FINDRISC questionnaire, which is simple to use (age, BMI, waist circumference (WC), physical activity, daily consumption of vegetables and fruits, antihypertensive drug use, and personal history of patients).

Diagnosis

At least three of the following factors were used to develop diagnostic criteria:

1. Hypertriglyceridemia (150 mg/dL);
2. Abdominal obesity (waist circumference: 102 cm in males, 88 cm in females >cm);
3. Low levels of high-density lipoprotein (HDL) (40 mg/dL in men, 50 mg/dL in women);

Hypertension is described as a blood pressure reading of 130/85 mmHg or higher. 5. Hyperglycemia (fasting blood with type 2 diabetes was designed to detect high- Hyperglycemia, and a family history of diabetes) to determine who is at risk for Type 2 DM. Five groups were established based on the diabetes risk ranking. Group 1 FINDRISC score 7, moderate risk, and 4% risk of developing diabetes; group 3 FINDRISC score 7-11, diabetes development 16 percent; 4th group FINDRISC score 15-20 high risk and diabetes development 33 percent; 5th group FINDRISC score>20 very high risk and diabetes development 33 percent.

The Tanita SC 330S instrument was used to assess the body components. Tanita was used to assess TBW and BMR. The BMI was determined by dividing the weight in kilogrammes by the height in metres squared. With subjects standing, WC was measured in centimetres between the underside of the lowest rib and the iliac crest. After 10 minutes of rest, blood pressure was measured on the right arm in millimetres of mercury (mmHg). The ethics committee gave their approval (71522473/050.01.04/14).

Triglycerides, HDL cholesterol, and fasting blood glucose (FBG) were measured in milligrams per deciliter. After 12 hours of fasting, venous blood samples were taken and HbA1c and other biochemical results were obtained. The equation [fasting glucose (mg/dL) fasting insulin (mu/ml)/405] was used to measure the homeostasis model assessment-insulin resistance (HOMA-IR). The Euglobulin clot lysis assay (ECLA) kit (Roche, Germany) was used to measure 25-OH-D3 levels, which were found to be acceptable by endocrine association standards (less than 30 ng/mL).

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