# Endocrinology 2020: What is the impact of dry eye disease in type 2 diabetes mellitus?- LailyNajafi - Iran University of Medical Sciences

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Type 2 diabetes is a long-lasting ailment that shields your body from utilizing insulin in the manner in which it should. Individuals with type 2 diabetes are said to have insulin opposition.

Individuals who are moderately aged or more seasoned are well on the way to get this sort of diabetes, so it used to be called grown-up beginning diabetes. Be that as it may, type 2 diabetes likewise influences children and teenagers, primarily on account of youth heftiness.

It's the most widely recognized sort of diabetes. There are around 29 million individuals in the U.S. with type 2. Another 84 million have prediabetes, which means their glucose (or blood glucose) is high however not sufficiently high to be diabetes yet.

### **Reasons for Type 2 Diabetes**

Your pancreas makes a hormone called insulin. It enables your cells to turn glucose, a sort of sugar, from the food you eat into vitality. Individuals with type 2 diabetes make insulin, yet their cells don't utilize it just as they should.

From the outset, your pancreas makes more insulin to attempt to get glucose into your cells. Be that as it may, in the end, it can't keep up, and the glucose develops in your blood.

Typically, a blend of things causes type 2 diabetes. They may include:

- Qualities. Researchers have discovered various bits of DNA that influence how your body makes insulin.
- Additional weight. Being overweight or stout can cause insulin opposition, particularly on the off chance that you heft your additional pounds around your center.
- Metabolic condition. Individuals with insulin opposition regularly have a gathering of conditions including high glucose, additional fat around the midriff, hypertension, and elevated cholesterol and triglycerides.

A lot of glucose from your liver. At the point when your glucose is low, your liver makes and conveys glucose. After you eat, your glucose goes up, and your liver will normally back off and store its glucose for some other time. In any case, a few people's livers don't. They continue wrenching out sugar.

Terrible correspondence between cells. In some cases, cells impart inappropriate signs or don't get messages accurately. At the point when these issues influence how your cells make and use insulin or glucose, a chain response can prompt diabetes.

Broken beta cells. On the off chance that the cells that cause insulin to convey an inappropriate measure of insulin at an inappropriate time, your glucose gets perplexed. High glucose can harm these cells, as well.

### **Type 2 Diabetes Diagnosis and Tests**

Your primary care physician can test your blood for indications of type 2 diabetes. Typically, they'll test you on two days to affirm the analysis. Be that as it may, if your blood glucose is exceptionally high or you have numerous side effects, one test might be all you need.

A1c. It resembles a normal of your blood glucose in the course of the last 2 or 3 months.

Fasting plasma glucose. This is otherwise called a fasting glucose test. It quantifies your glucose on an unfilled stomach. You won't have the option to eat or drink anything with the exception of water for 8 hours before the test. Oral glucose resilience test (OGTT). This checks your blood glucose previously and 2 hours after you drink something sweet to perceive how your body handles the sugar.

### **Type 2 Diabetes Prevention**

Receiving a solid way of life can assist you with bringing down your danger of diabetes. Get in shape. Dropping only 7% to 10% of your weight can cut your danger of type 2 diabetes fifty-fifty. Get dynamic. Thirty minutes of energetic strolling a day will cut your hazard by right around a third. Eat right. Keep away from exceptionally handled carbs, sweet beverages, and trans and soaked fats. Cutoff red and prepared meats. Stop smoking. Work with your PCP to shield from putting on weight after you quit, so you don't make one issue by understanding another.

Aims and objectives: Our purpose was to investigate the prevalence of dry eye disease (DED) based on osmolarmeter as a gold standard method for diagnosis of tear hyperosmolarity and explore if peripheral neuropathy, nephropathy, and diabetic retinopathy have any correlation with DED in people with type 2 diabetes mellitus.

#### Materials and methods:

We studied 267 people with type 2 diabetes at Institute of endocrinology and metabolism from August 2011 to November 2012. This study was a part of a diagnostic accuracy survey comparing various methods for diagnosis of DED. Tear osmolarity was evaluated using tear lab osmolarity system. Microvascular complications were measured for all of the subjects by Michigan neuropathy screening instrument and the albumin/creatinine ratio in a spot urine sample.

#### **Results:**

The prevalence of DED was 27.9% with female predominancy. The mean value for tear osmolarity was  $302.3\pm13.48$  mOsmol/L. A significant correlation was described between DED and diabetic retinopathy(P=0.01). In addition, both mentioned items had significant correlation with HbA1C. DED was more prevalent in participants with proliferative diabetic retinopathy and macular edema. No significant correlation between treatment type, cigarette smoking, and other microvascular complications was defined by DED.

### **Conclusion:**

Diabetic retinopathy especially advanced stages of diabetic retinopathy are the most prevalent microvascular complication of type 2 diabetes mellitus who suffered DED

corrected score(p-value: 0.002), and memory quotient (p-value: 0.000).

This study showed the efficacy of levothyroxine on cognitive function of subjects with subclinical hypothyroidism.

### Keywords:

Memory Quotient, Subclinical Hypothyroidism, Wechsler Memory Test, Levothyroxine

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