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**The effect of high blood sugar on the refraction examination****Fatma Alqarni***Diabetes Center in ALBAHA Region, Saudi Arabia*

In light of the challenges that the ophthalmologist may face, Not all auto refractor readings need to be correct, and this is not limited to healthy people, accommodative spasm patients, patients with cataracts, or changes that may occur in patients after PRK or LASIK. Here we also highlight type 1 diabetes for you. Their unstable diabetes levels led to refractive errors even though their vision was normal. This is because the height causes swelling of the eye lens Which results Myopic shift, On the other hand, low blood sugar causes also increase the refractive index of the aqueous humor resulting in hyperopic shift. Here, we strengthen the role of the ophthalmologist by focusing on the average sugar measurements for diabetics and not relying on readings, especially for those who suffer from unstable blood sugar levels.

**Introduction:** The lens is composed of exceptionally specialized longitudinal cells that are stacked like layers of an onion. These cells are characterized by having no blood supply, no organelles, and no metabolic activity. The cells that make up the lens of the eye are densely filled with transparent crystalline proteins. Proteins make up approximately 60% of the lens of the eye, and this concentration of protein is higher than any other tissue in the body.

**Design/methodology/approach:** The proposed approach was used to study the effect of high blood sugar levels in diabetic patients on refraction examination

**Findings:** High blood sugar levels in diabetic patients is considered one of the important reasons that affects the mechanism of the eye lens, which results in swelling of the lens of the eye, which in turn creates false data for refractive Error. By studying some cases of type 1 diabetes patients aged between 3 and 18 years. I present an important suggestion regarding not relying entirely on Auto Reef measurements, especially for those who achieve the level of 20/30 or more during the vision test.

**Case analysis:** A 50-year-old man presented to the ER complaining of chest pain radiating to left arm, back and Slurred speech. Past Medical History of Type 1 diabetes with unstable RBS readings. Post-Operative history: FREE.

**Biography**

Fatma Alqarni works as an Optometry Specialist at Diabetes Center in ALBAHA Region, Saudi Arabia.