Vol.7 No.4

Diabet type II related with Anemia

Luljeta Hetemi

Institute of biochemistry Skopje, North Macedonia

Abstract

The purpose of this study was to follow-up patients with type II diabetes through testing of: glycated hemoglobin (HbA1c) derivatives, but the importance of the HPLC method during HbA1c testing in: diagnosis, monitoring, follow-up, access to type II diabetes therapy also obtained results from: diabetes mellitus, diabetes, patient insulin insertion, monotherapy, but also findings of abnormal HgB forms in diabetic patients, such as hemoglobinopathies, and during the research we found that the diagnostic orientation through a HbA1c test with HPLC is in some pathology, which was both preventive and diagnostic in other pathologies. The study was conducted on 150 patients, of which 80% were type 11 diabetes, age 40-65 years, with HbA1c ranging from 6.9-11%, HbA from 6-8, HbF of over 1 % -8%, the control group was non-diabetic, suspect, dyslipidemia patients with no signs of type II diabetes, the reason for testing being because they had high insulin resistance, or moderate, some were cases of polycystic ovary syndrome etc, their age ranged from 40-65 years. In addition to the absolute accuracy of the HPLC method in testing HbA1c, in this study we found HbF positive of patients with type II diabetes, which is leading us to anemia, and the cause of this anemia is thought to be impairment of renal function, such as diabetic nephropathy complication of type II diabetes, but a still unclear mechanism between abnormal HbF congenital and type II diabetes will to remain uninvolved as we were not able to test all the patients for Hb electrophoresis. From these laboratory findings, HbF results in increased pathology: in addition to being an innate congenital form, its elevated level was also found in cases of pernicious anemia, hemolytic, thalassemia, thyrotoxicosis, venous thrombosis. When blood glucose levels are attached high,glucose molecules to RBC,the longer hyperglycemia occurs, more the glucose binds to Hb, and higher the glycated Hb. So from this study we found approximately 35% of cases with LA1c positive, where diabetic nephropathy had already begun, which was confirmed by positive microalbuminuria, and consultations with patients with nephrologist. Abnormal forms of HbF lead in our country, and in these 150 cases there were no other abnormal forms of HbF. we conclude with the facts that HPLC can freely be called the gold standard diagnostic method, as it has proven to be the best method. Risk for pre-diabetic, where 20% of our patients, with HbA1c values between 6-6.4%, about 10% of our patients where with HbA1c values more than:6.5%,tested for the first time, that consider diabetic, about 25% where with adecuate control:with 6.6-7% values, and inadecuate control according ADA with 7-8% values of HbA1c, about 45% of them.



ISSN 2349-7211



Biography:

She started working in Olive medical Laboratory and now she is currently working as a Resident Doctor in Biochemistry Institute Skopje, North Macedonia..

Speaker Publications:

1. Food intolerance and Autism, ARVIN med

2. H2 breath test and lactose, fructose malabsorbtion, ACTA scientic

3. Zinc deficiency, hypovitaminosis D and Autism, in process for publishing

4.From casein to casomorphine, from Gluten to gliadinomorphine, shows a strong association with autism etiology, and treatment. The ASD problem is food and biochemistry, these make the change of the genetic mutations-Nutritional, science and food Chemistry- on June:22-23.2020-Toronto, as speaker, or al presentation

5. Diabet type ll related with anemia. HPLC is gold standard method for glycated hemoglobin(HbA1c), who detects anormal forms of Hemoglobin, such as HbF positive in other diseases as:anemia, congenital hemoglobinopathy, deep venous thrombosis, thyrotoxicosis and some neoplasms.

12th International Conference & Expo on

<u>Chromatography Techniques</u>; Berlin, Germany - April 20-21, 2020.

Abstract Citation:

Luljeta Hetemi, Diabet type ll related with anemia, Advanced Chromatography 2020, 12th International Conference & Expo on Chromatography Techniques; Berlin, Germany-April 20-21,2020

(https://chromatography.pharmaceuticalconferences.com/abstra ct/2020/diabet-type-ll-related-with-anemia)