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Fasting Impaired Glucose and Impaired Glucose Tolerance in a Mexican Population

RUIZ G. GLORIA, Arellano M. Alma Gpe, Ruiz L. Marta, Arturo G. Acevedo, Arturo L. Preciado. Gpo. Inv. Clinico-Epidemiologica. Departamento de Ciencias de la Salud, Universidad Autonoma Metropolitana - Iztapalapa, Mexico, DF, Mexico

Type 2 diabetes mellitus is now recognized as a major health problem. Impaired glucose tolerance (IGT) and impaired fasting glucose (IFG) are intermediate stages between normal and diabetes and can predict the development of type 2 diabetes.

Our objective was to determine the prevalence of IGT and IFG in a Mexico City population in relation to some risk factors.

We apply oral glucose tolerance tests to non diabetic subjects. Fasting and 30, 60, 90 and 120 min post 75 g oral glucose were determined in capilar blood. The results were interpreted according to the ADA criteria. We also evaluate sex, age, body mass index and familiar antecedents of type 2 diabetes.

A total of 385 subjects (40% males and 60% females, 17-69 years of age, 16.7-36 BMI and 56% with familiar antecedents of diabetes)were studied. The prevalence of subjects with impaired glucose levels (IGL) was 13% (52% had IGT, 32% had IGT and IFG and 16% IFG). Females had higher prevalence of IGL than males (72% and 28% respectively). IGL were more frequent in subjects with higher BMI values, aged 30 - 40 years and with familiar diabetes antecedents.

It is important to detect subjects who are in an intermediate glucose state to try to delay the begining of diabetes through terapeutic procedures and to avoid the complications of this desease.

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Born Small and Grown Big Increases Risk of Death in an Indian Village

ANJALI A. JOGLEKAR, Kishor M. Shelgikar, Sonali S. Rege, Himangi G. Lubree, Kondiram N. Raut, Swapna S. Deshpande, Chittaranjan S. Yajnik. Diabetes Unit, K.E.M. Hospital Research Centre, Pune, Maharashtra, India

We followed 321 villagers >40 years of age in a village near Pune after 5 years of baseline study. Twenty one (6.5%) villagers had died (8 men, 13 women), 5 had migrated, and 13 declined to be studied. We report on anthropometric and metabolic predictors of death in this community.

Dead subjects (both sexes) were older (69 Vs 54 y, p<0.001), shorter and had a smaller head circumference (1.54 Vs 1.58m, 52.0 Vs 53.3cm respectively, p<0.05 both, age and sex adjusted) than the subjects who were alive. Dead women also had a larger waist circumference and higher waist-hip ratio (73.6 Vs 66.5cm, 0.87 Vs 0.77 respectively, p<0.05, age adjusted) than the live ones.

Dead subjects (both sexes) had higher systolic blood pressure (127 Vs 117 mmHg, p<0.05), higher 2h plasma insulin concentration during 75g OGTT (72 Vs 48 mU/L, p<0.05) and higher microalbumin-creatinine ratio (41 Vs 14 mg/mg, p<0.01) than those in the live subjects; dead men had lower total cholesterol concentration (126 Vs 150mg/d]; p<0.05) and dead women had a higher pulse rate (85 Vs 77 per min, p<0.05 all age adjusted).

This is one of the few reports of a prospective risk evaluation in rural Indian subjects. Our results suggest that individuals who had poor growth in early life (smaller height and head circumference) but had a positive energy balance in later life (larger waist circumference) are at a higher risk of dying than their counterparts. The risk could be mediated by heightened sympathetic activity and insulin resistance. Microalbuminuria was a significant predictor of death.

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Incidence of Type 1 Diabetes Mellitus under 15 Years in Santiago, Chile. 1993-1997

ELENA CARRASCO¹, Alexandra Mondragón², José Luis Santos², Francisco Pérez², Marcelo Calvillán³. ¹ Diabetes, Faculty of Medicine. San Juan de Dios Hospital. University of Chile, Santiago, Chile; ² Nutrition Epidemiology, Nutrition and Food Technology Institute, Santiago, Chile; ³ Endocrinology, Faculty of Medicine San Juan de Dios Hospital University of Chile, Santiago, Chile

There is an extraordinary variation in the incidence rate of Type 1 Diabetes in differents countries and ethnic groups. In Chile we began our incidences studies in 1986 and the National Registry was stablished in 1995. Objective: Determine Type 1 Diabetes incidence rate under 15 years, between January 1⁰, 1993 and December 31, 1997, according with DIAMOND protocol. Methods: The inclusion criteria: diabetes diagnosis in the period studied, under 15 years at diagnosis and use of Insulin since the diagnosis. Al least two data sources were used, the primary source included: all hospital medical records (from state, private and force arm hospital), emergency units and the physicians private records, endocrinologist, pediatrics and diabetologist. The second source was the Chilean Juvenil Diabetes Foundation. Statistical methods: STATA 6.0 programm, considering 95% CI. Results: A total 361 type 1 diabetes were found, 153 men (48.4%) and 163 women (51.6%) (Non significant differences). The mean rate incidence of the period was 3,92/100,000 (CI 95% 3.50 - 4.37). The adjusted age rate was 3.89/100,000. The highest significant incidence was observed at 10 - 14 years group. Concerning with the seasonality the significant highest incidence rate was during Autumn-Winter period. Conclusion: The incidence rate of type 1 diabetes mellitus under 15 years in Santiago, Chile, was 3.92/100,000 (CI 95% 3.50-4.37). Supported by GRANT: FONDECYT Nº1970204

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Prevalence of D.M. in the Northern & Eastern Region of Syria NIZAR EL BACHE, H. Abouras, A. Jarwod, M.A. Hachem. Internal Medicine, Aleppo Hospital, Aleppo, Syrian Arab Republic

Study: A study was carried out covering a group of 1700 diabetic patients, 700 of which were from the northern region of Syria (Aleppo and around) and 1000 from the eastern region (Raqqa, Hassaka and neighbouring villages).

The patients were divided into categories according to their age (starting with the age of 20). Males were 49.5%.

In accordance with the WHO Diagnosis Criteria concerning the prevalence of DM, a 75-gm. dose of glucose was given orally (O.G.T.T) and the capillary glucose was measured by means of a glucometer 2 hours later.

The incidence of DM was 9.41% (3.2% undiagnosed) ranging from 6.3% in patients between the ages of 20 - 29, to 13.9% in patients over 59 whereas the incidence of G.I.T was 9.9% with a noted increase after the age of 49. Those who had a family history of DM, were 29.5%. The diabetic patients with obesity were 13.6%. The influence of a diet style and the standard of living was less evident in the eastern region than in the northern region. Last year a similar study was conducted by the Health Ministry in Damascus where the prevalence rate of DM was 12.7%, which can be compared with our study.

Although several studies on the prevalence of DM were conducted worldwide, yet we can trace a little and a very restricted number of studies covering the prevalence of DM in Syria.

Conclusion: The prevalence rate of DM in Syria was between 9.41 - % 12.7 which is much higher than that indicated in the last I.D.F report (1.32%) which was published in 1998.

The prevalence of DM in Syria as well as in the neighboring countries of the region is increasing rapidly.