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PROGESSION OF AUTOANTIBODIESANTI GADANTI IA2FORM 1DIABETSAGED6 22 YEARS IN MAYO HOSPITAL LAHORE

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Abstract:

Diabetes is a type of disease in which sugar level and glucose of body is at very maximum level. It is observed that the diabetes has two forms. First form of diabetes in which body makes low level of insulin. Yes, form 1 diabetes is that type of diabetes in which body starts producing no insulin or minimum insulin. Insulin is a chemical of body which is responsible for observing of glucose in blood. Test had been conducted in Mayo hospital Lahore to find the progression of these two auto antibodies. Studied had been conducted on those patients that already have form 1 diabetes. During studied it is observed that the auto antibodies present in body after 3 years of form 1 diabetes. Fall of auto antibody ANTI-GAD have been observed 8th to 9th values from 118 to 10.15. It is observed that minimization of another auto antibody second auto antibody observes fall on 10th years' time with this disease with the value of 56.15. It is observed that these two auto antibodies were present at 10th year of this disease destruction of beta cells exist that is responsible for making of insulin. If enough insulin body does not produce it leads many patients to death. Proper treatment of diabetes us necessary,because if patient will not treated properly then he/she will die because of this disease. So proper guideline and take care of Diabetic patient is necessary.

Keywords: *Diabetes, form 1diabetes, Mayo Hospital Lahore, death causing.*

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INTRODUCTION:

The form 1 of diabetes is a form in which sugar and glucose level of body is very high. It is a auto-immune disorder that effects the lower of cells which is responsible for production of insulin [1]. It gradually slows down or destructs beta cells [2]. When proper treatment not given to body at time it may leads patient to death. These beta cells responsible for production of insulin. Beta cells produce insulin which is responsible for observance of glucose in blood. When the destruction of beta cells begins it effects production of insulin. This activated by environmental factor and few years of revolution leads to clinical signs when the beta cells become insufficient in body. A-1 or form 1 have a major health issues in a society which causes the deaths of many people [3]. This disease spreading because of lack of treatment. It is a disease that affects 32 million people in world wide. Approximately 138500 people aged from 20 to 80 died because of A-1 or form 1 diabetes in 2011-2012[4]. It covers all over the world in Africa 4000 1-14 years have form 1 or A-1 diabetes [5]. In Pakistan its getting a great momentum by the passage of time in Pakistan [6]. The clinical diagnosis of form 1 diabetes is that glucose level at its peak value or its maximizes value of 2.27 gram per liter if the glucose is less than 1.27 g/l it means that patient have A-1 diabetes [7]. This disease must be diagnosed early as soon as possible before its gets very aggressive or very critical condition which leads many patients to death[8]. The important goal of this study is to find how many people suffering from this disease and to aware more peoples about this disease so that the spreading of this disease may control and save many people life[9]. The main factor of this research that auto antibodies of form 1 patients between aged 6-22 year[10].

METHODOLOGY:

We will start study on confirm patients of A-1 patients. 30 test had been conducted in Mayo Hospital Lahore. The sex ratio is 0.88 14 boys and 16 girls. This study started in January 2015 to April 2018. The selected patients were aged from 6-22 years and have diabetes from 2008 to 2017. They all have complete medical folder HIV-positive patients treatments will be excluded from study. The serum was used in biological process. This project approved by Mayo Hospital Lahore. We will find the positiveness of test if auto antibodies are equal to 11. It is also cosidered to be positive if auto antibodies maaximizes than 11. The statistics of data was studied or draw by using graph. This graph show that when and how much years of diabetes these auto antibodies increases or decreases. It helps many people to study or spread awareness about this disease so that the lives of many people may save from this disease. If proper treatment given to a body on time it saves many people. It is also shows from previous studies that this disease gets momentum in Africa continent. Following graphs after results have been shown all studied based on age sex and type of diabetes.

RESULTS:

Following figure (A) in this figure it is observe the type 1 auto antibody. It is observed that after 3 year of time the anti-GAD antibodies increase upto 688. After 5 to 6 years of diabetes the value lowersup-to 305 to 210. The rebound of autoantibodies will exist on 8th years by this disease to 171 IU/ml. Then the fall will be observed un- till the cancellation will exist from 8th to 9th years of diabetes. Figure (B) shows all about this disease. It is observed that after one year of diabetes the autoantibodies are at its peak value 322 IU/ml. After two years the falls have been observed till 7th year of autoantibodies. In 7th year 25 IU/ml values have been observed. In this it is proved that the autoantibody Anti-GAD after two years of diabetes it increases. Then after 5 to 6 years its lower up then at the 7 year of diabetes it reaches up-to its lower value. We also observed that the autoantibody anti-IA2 we observed that one years of diabetes it reaches at its peak value. After seven years the fall had been observed that it reaches up-to 25 IU/ml.

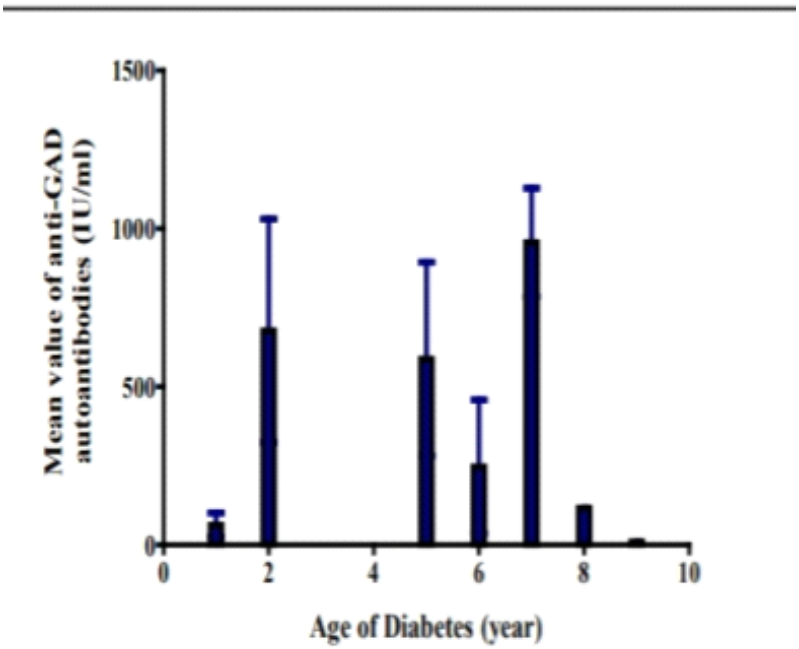

FIGURE (A)

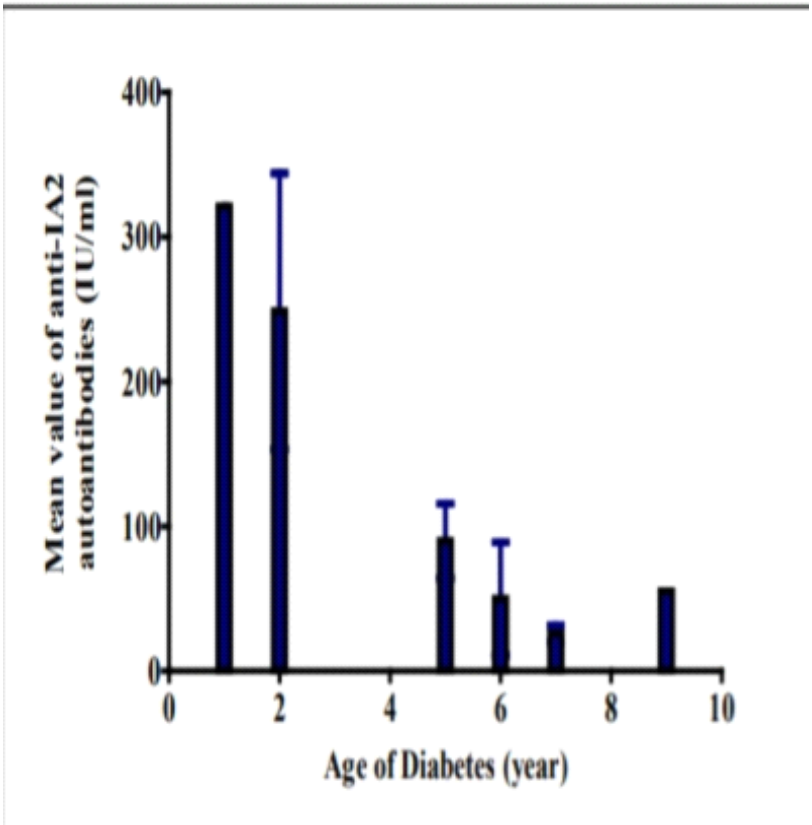

FIGURE (B)

DISCUSSION:

Type 1A diabetes is a type of diabetes which caused the damaging of beta cells which effect the insulin. The insulin is responsible for observance of glucose in blood or proper energy [11]. Another step involved the bystander effect in which the infection of beta cells exist. Some writer shows that the autoantibodies will disappear by the passage of time hence the disappearance shows in Mayo Hospital Lahore. This is due to minimization of beta. This become the importance of time that un reveal these two diseases in Mayo Hospital. Result shows that the anti-Gad antibodies are at peak value after two years of diabetes [12]. And between 3 to 6 there was a sharp fall in it. Also anti-IA2 autoantibodies are at its peak after first years but gradually its falls notice in next five to six years and last up-to 25 IU/ml. These results show that the beta cells which is responsible for insulin continuously destruct. A fast destruction exists in body of beta cells which is responsible for insulin [13]. The rebound of autoantibodies exist in 9th year due to immune system of human body [14]. So this study shows that autoantibodies are directly proportional to destruction of cells. When value of autoantibodies increases the destruction of cells increases. When the value of antibodies decreases the minimization of those important cells becomes less. If deficiency of beta cells exist in body [15]. It is responsible for making of insulin if body does not make enough insulin then the proper observation of glucose does not exist in blood cells then the weakness exist in body [16]. It leads many patients to death.

CONCLUSION:

It is shows that the autoantibodies how it plays an important role in body if they do not present how it effects and what drama it does in body. We also observed that it does not depend on age. It depends upon age of a disease. We observed that when the age of diabetes increases how autoantibodies react and what role they play in diabetes. We also observed that the autoantibodies are directly proportional to destruction of beta cells. Diabetes is spreading in all over the world the momentum of diabetes in Africa is very high many deaths take place in Pakistan due to the diabetes. The important factor and major goal of this study to spread awareness of this disease. If the proper treatment given to body at exact time it saves many lives otherwise many people lost their life and leads unhealthy life due to no awareness. Due to no awareness the proper treatment did not given to body on time it leads many people to death. This study un reveals the importance of auto anti bodies in Mayo hospital Lahore.

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