

THERAPEUTICAL MANAGEMENT OF DIABETES MELLITUS: CASE REPORT**Abdullah Omer¹, Naeem Qaiser¹, Naeem Akhtar², Safyan Tariq¹ and Muhammad Ansar¹**¹Faculty of Pharmacy, University of Sargodha, Sargodha 40100, Pakistan²Genral Physician, Ibn-e-Sina Hospital Sargodha, Pakistan**SUMMARY**

Diabetes Mellitus is a chronic, incurable, progressive systemic disease characterized by dysfunction in metabolism of fats, carbohydrates, proteins, insulin and function , structure of blood cells and nerves(1). This is the case of 50 years old woman with diabetes mellitus type 2 is described here. Her symptoms started approximately 5 years ago. These include polydipsia (excessive thirst), polyurea (excessive urination), polyphagia (excessive hunger) and fatigue. Her physical examination showed that her blood glucose level was 214mg/dl. After examination she was recommended Piozer 30mg, gut glucose level was not controlled properly. Then treatment was altered to insulin (Humulin 70/30). Her family history, past history was negative. \upon laboratory diagnosis, i.e., RFT, hematological tests was normal, but there was an elevated level of cholesterol.

Key Words' (Diabetes Mellitus)

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INTRODUCTION

Diabetes Mellitus is a chronic, incurable, progressive systemic disease characterized by dysfunction in metabolism of fats, carbohydrates, proteins, insulin and function , structure of blood cells and nerves. Incidence of DM is increasing worldwide, for unknown reason however it is speculated that environmental changes may cause modification to the Diabetes-associated alleles. Approximately 50-60% of patients with Type 1 will present before 20 years of age. Type 2 Diabetes Mellitus is much more common than Type1, accounting for 80-85% of people with diabetes. In U.K. type 2 currently affects approximately 1.5 million people, and up to another million are thought to be undiagnosed. the incidence of Type 2 rises with age and with increasing obesity. As with Type 1, there are major ethnic and geographical variations. Diabetes is 5 times more common in Asians (4).

Type 1 diabetes mellitus (IDDM, Insulin dependant Diabetes mellitus) is disease that causes destruction of insulin producing pancreatic B cells, the development of which is either autoimmune T-cells mediated destruction (Type1A) or idiopathic (Type 1B). Type 1 diabetes mellitus usually develop in young (below the age of 30), although it can develop in older and is usually associated with a faster onset of symptoms leading to a dependency on extrinsic insulin for survival(2). Type 2 diabetes mellitus results from a progressive insulin secretory defect on the background of insulin resistance. It is more common above age of 40. Various factors contribute to the development of Diabetes mellitus Type 2 i.e., genetic factor, diminished B cells function is

postulated to cause abnormalities in insulin secretion, a peripheral site defect is postulated to lead to insulin resistance, this condition thought to result from post binding abnormalities (1).

CASE REPORT

50 years old female I.F. was examined as out patient at Ibn-e-Sina Hospital in Sargodha in 08-09-09, because of Diabetes Mellitus. She has been suffering from DM symptoms for 5 years ago and hypercholesteremia. Initially she was treated with oral hypoglycemic agent Pioglatizone (Piozer 30mg) but her blood glucose level was not properly controlled then her medication was altered to insulin (IHumulin 70/30) about two years ago. Her latest glucose level on the day of examination was 172mg/dl. Her B.P. was 130/80. Hb. level was 9.3g/dl. Her latest recommended medications are, Humulin 70/30, Piozer 30mg, Lipirax 20mg (Atrovastatin) and Ibertfolic.

CONCLUSION

After using the above prescribed medications the patient's blood glucose level and cholesterol level are well controlled. The patient is also doing regular exercise and taking controlled diet. The therapeutical agents of pioglatizone (Piozer 30mg), insulin (IHumulin 70/30), Lipirax 20mg (Atrovastatin) and Ibertfolic have shown good clinical compatibility to improve the life standard of Mrs. IF. The glucose level has been maintained at required optimum level.

REFERENCES

1. **Leon Shargel, Alan H. Mutnick, Paul F. Souney**, (2005), 1&3. Comprehensive Pharmacy Review, Seventh Edition, p 351 West Camden Street, Baltimore, MD, Wolters Kluwer Pvt. Ltd. Publcatin, India, 21201 p. 1165&1167
2. **Roger Walker, Cate Whittlesea**, (2007), Clinical Pharmacy and Therapeutics, 4th Edition, p 629-630
3. **Vinay Kumar, Ramzi S. Cotran, Stanley L. Robbins** (2007) Robbins Basic Pathology, 7th Edition .Saunders (An imprint of Elsevier science), Elsevier Philadelphia, USA 338-341
4. **Leon Shargel, Mutnick H.A., Souney F.P., Swanson N.L.**, (2004). Comprehensive Pharmacy Review. 4th Ed. (2004). 351 West Camden Street, Baltimore, MD 21201
5. **Stephen J. Mcphee. Maxine A.**(2007), Current Medical Diagnosis and Treatment, 46th Annual Volume, McGraw Hill Companies Inc. California USA
6. **Papadakis, Lawrence M. Tierney Jr.** (2006), Current Medical Diagnosis and Treatment, 46th Edition, McGraw Hill Companies Inc. California USA
7. **Bertram G. Katzung** (2004). Basic & Clinical Pharmacology, 9th Edition, The McGraw Hill companies, New York, USA p 782-790.