International Journal of Pharmaceutical Research and Applications
Volume 7, Issue 3 May-June 2022, pp: 773-774 www.ijprajournal.com ISSN: 2456-4494

A Case Report on Glimepiride Induced Cholestasis .

Dr.Sai Keerthana P.C[1*] Ahammed Sakkir Hussain[2] Muhammed Hudaifa[2], Abin kurian[2]

*[1]*Assistant Professor ,Department of Pharmacy Practice,Alshifa College of Pharmacy, Perinthalmanna ,Kerala ,India*

[2] Pharm D Student, Department of Pharmacy Practice , Alshifa College of Pharmacy, Perinthalmanna ,Kerala ,India

Submitted: 15-05-2022 Revised: 20-05-2022 Accepted: 25-05-2022

ABSTRACT

Sulfonyl Ureas are one of the major cause for Acute Cholestasis. Glimepiride , a Second generation Sulfonyl urea is considered as one of the causes responsible for this complication.We present a 65 year old female having Cholestasis with the initiation of Glimepiride which was resolved by cessation of therapy . We have done Naranjo Causality Assesment to establish the relationship between the drug and observed adverse effects . The patient had no history of Cholestasis before .Cholestasis is considered as one of the rare ADR of Glimepiride . A thorough drug history is therefore helpful in any case of unexplained cholestasis.

Key words: Glimepiride, Cholestasis , Diabetes Mellitus

I. INTRODUCTION

Glimepiride is an sulfonyl Urea drug which can be used with diet and exercise for proper control of Diabetes Mellitus.They act by blocking Pancreatic Beta cell Potassium Channel causing subsequent Depolarisation and thereby Insulin release Sulfonyl Ureas are widely prescribed for Diabetes and are infrequent cause for hepatotoxicity .Other side effects includes Hypoglycemia ,Weight gain and Cardiovascular toxicity .we present a case of Cholestasis in a Diabetic patient which was started shortly after initiating Glimiperide and resolved after its withdrawl.

II. CASE HISTORY

A 65 year old female with Past history of Hypertension for 18years and Diabetes which was recently diagnosed was admitted on the Gasteroenterology Department with chief complaints of Lower Retro Sternal Pain radiating to back for four days and pain was worsenened during work other complaints includes early satiety , increasing tiredness , weight loss. She was on Anti Hypertensive medication for past 18 years and was recently diagnosed with Type 2 DM and was prescribed with Glimepiride 4 mg per once daily . Her Physical examination includes PR -90, BP-110/70. Laboratory examination showed a fluctuation in LFT , including elevated Direct Bilirubin and Serum Alkaline Phosphatase. During admission direct Bilirubin was found to be 2.9mg/dL and serum alkaline phosphates was found to be 240 IU/L. Based on the symptoms and laboratory investigations the patient was diagnosed with Drug induced Acute Cholestasis . The drug Glimepiride was with holded and Human Insulin was substituted, following the LFT was reduced to normal value within a 12 days with no further Recurrence. The patient condition improved symptomatically and was Discharged . Causality assessment was performed using WHO Causality Assessment scale and Naranjo scale, the event was found to be Possible and Severity was assessed as moderate

III. DISCUSSION

Treatment with Sulfonyl ureas plays a vital role in management of of Type 2 Diabetes Mellitus, however they are frequently associated with adverse effects including Liver injuries.A significant, and frequently undiagnosed, cause of Acute Cholestasis is drugs. Acute Cholestasis has a clinical and laboratory profile that is similar to other hepatobiliary diseases, such as Calcular Obstructive Jaundice. Any patient with Acute Cholestasis should have a full and thorough Medication History collected by the Clinical Pharmacists.The patient's symptoms improved dramatically when the offending agent is stopped, and adverse outcomes are avoided.(1).The treatmentof medication induced Cholestasis focuses on stopping the offending medicine as soon as possible after it is identified, as well as

International Journal of Pharmaceutical Research and Applications
Volume 7, Issue 3 May-June 2022, pp: 773-774 www.ijprajournal.com ISSN: 2456-4494

monitoring the patient clinical and laboratory improvements. Symptomatic treatment for Vomiting, Fever, and, in particular, Pruritis, should be started as soon as possible. The prognosis for drug induced Cholestasis is normally good , nevertheless, severe cases may develop to liver cirrhosis and eventually liver failure[(2)]

IV. CONCLUSION

The case report highlights Glimepiride induced Cholestasis in an elderly patient taking glimepiride for type 2 DM . Furthermore this case point out the importance of LFT monitoring regularly in patients consuming sulfonyl ureas like glimepiride , also the need for a better communication by means of providing counselling on medications as well as lifestyle modifications and by giving patient information leaflets.

REFERENCES

[1]. Athina Chounta,Spyros Zouridakis et al. Cholestatis liver injury after GlimepirideTherapy.Journal of Hepatology volume 42 , issue 6,page 944-946 , june 2005

[2]. Hesham Omar , Jaya Kolla et al. Glimepiride induced Cholestasis in a man with Diabetes Mellitus : a case report .Journal of medical case reports ,article number :9257 , Sept 2009.

[3]. Sitruk V, Mohib S et al .Acute Cholestatic Hepatitis induced by Glimepiride .Gastroenterol Clin boil,(12) :1233-1234 ,dec 2000.