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HEPATOTOXICITY IN SICKLE CELL DISEASE AND THALASSEMIC PATIENTS WHO ARE TAKING EXJADE® IN BASRA

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ABSTRACT

Aim

Deferasirox is the new oral iron chelator, which is used to decrease chronic iron overload in hemoglopinopathy patient. Deferasirox can cause hepatotoxicity and induce hepatitis lead to hepatic injury and failure. This study was to estimate the frequency of hepatotoxicity in sickle cell disease (SCD) and Thalassemic patients who are taking Exjade® (deferasirox) in Basra.

Methodology

This study was conducted from April 2013 to February 2014 at Center For Hereditary Blood Diseases HBDC in Basra.The information was collected according to questioner forma include name, age, diagnosis, treatment, adverse effects included nausea, vomiting and frequency of bowel motion. The blood samples were taken from each patients and they stored at -8c for measurement of alanine aminotransferase activity (ALT), aspartate aminotransferase (AST), alkaline phosphatase activity (ALP), serum total bilirubin (TB) and serum ferritin.

Results

One hundred adult patients were 62 female: 38male. The mean of age was 25.74±10.59 years. The most of patients with age between 15-29 years (76%) and The most of patients with sickle cell disease was 60%. Among patients had nausea adverse effect (34%).There was not significant relationship between liver enzymes and TB with gender, age, the type of hemoglobinpathy and serum ferritin. There was only significant relationship between nausea scale adverse effect and ALT, AST and ALP levels.

Conclusions

The present study could not find a significant effect of any of the studied patients' characteristic with hepatic dysfunction in adult patients with sickle cell disease and thalassemia who were taking deferasirox. Therefore, hepatic dysfunction might be attributed to deferasirox use; however, it is mild in most of the cases and that reflected the accepted short-term safety of the drug.

KEYWORDS: Deferasirox, Sickle cell disease, Thalassem, Hemoglobinopathy

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