Evaluation of Iron Chelation Therapies for Thalassemia Patients in West Bank – Palestine

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Abstract :

Background: Severe iron overload is a major threat to the survival of the thalassemia major patients. Therefore, they must be considered as early candidates for iron chelation therapy. **Objectives:** The aims of this study were to evaluate the medications used for iron chelation in thalassemia patients and their outcomes.

Methods: The study was an observational cohort retrospective study. The medical records of all thalassemia patients who visited the selected hospitals and were prescribed at least one medication during the study period were reviewed. The hospitals included were Alia Governmental Hospital, Hebron, Al-Watani, Governmental Hospita/ Nablus and Palestinian Medical Complex/ Ramallah. The data was collected between August and December 2015. Data collection form was completed by reviewing patients' medical records. Statistical analysis was performed using Statistical Package for Social Sciences (SPSS version 16).

Results: During the study period, a total of 250 medical records were reviewed in three different governmental hospitals. The age of the patient ranged from 2-53 years with mean of 19.6±10.55 years. Iron chelating agent was found in the files for 246 patients. Most of them 168(67.2%) were using the oral medication deferasirox (Ex-jade) while 41(16.4%) were on the parenteral medication deferoxamine (Desferal). The hemoglobin (HB) ranged from 5.20 to 13.9 with mean 8.22 ± 1.40. Patients who reached the goal Hb in thalassemia patients >9 mg/dl were 57 (23.0%) only. The serum ferritin was less than 2500 mg/dl which is the accepted level in thalassemia patients in 167 (71.0%) of patients.

Conclusion: Most patients were on oral iron chelating agent, this may help in improving compliance. The target Hb and serum ferritin was not reached in many patients. Reviewing treatment plants and counseling patients regarding compliance are recommended.