



الملخص العربي للبحث المقدم من
الدكتور /يزي ثابت محمد عطوة
زميل طب الأطفال للحصول على اللقب العلمي
لوظيفة أستاذي مساعد

كلية الطب - جامعة الفيوم
قسم الأطفال

Transfusion transmitted infections in frequently transfused thalassemic children living in Fayoum Governorate, Egypt: Current prevalence and risk factors

ABSTRACT:

Regular blood transfusion therapy remains the main line of treatment in thalassemia major (TM). Transfusion-transmitted infections (TTIs) and iron overload are considered the major drawbacks of this therapy. This cross sectional study aimed to update the prevalence of hepatitis C virus (HCV) antibody, PCR confirmed HCV, (HBsAg), and human immunodeficiency virus (HIV) antibody among TM children. Clinical and epidemiological factors that can affect HCV infection prevalence rate were studied. The study included 121 children with β TM, 61 males and 60 females, with mean age 7.99 ± 3.57 years. Patients were evaluated for HCV antibody, HBsAg, and HIV-1 & 2 antibodies. All tests were done using ELISA. HCV positive cases were confirmed by RT-PCR. Twenty-five patients were positive for HCV antibody (20.7%); 22 patients of them were confirmed positive by PCR. Six patients (5%) were HBsAg-positive. None of patients was HIV-positive. Older ages were associated with an increased frequency of HCV positive infection ($p < 0.003$). More frequent transfusion ≥ 10 times/year and older age ≥ 10 years were reported as predictors of HCV infection ($p = 0.018$ and 0.011 respectively). Significant association of HCV and HBV infections was reported ($P, 0.01$). No significant effect for pre-transfusion or post-transfusion hemoglobin level on the frequency of HCV positive cases. HCV still represents a major health challenge for Egyptian frequently transfused patients. Prevalence rate of HBV infection is still relatively high. It is therefore necessary to implement measures to improve blood transfusion screening