
Sawsan M. Al-Banna¹, Asmaa N. Riad¹ and Sozan S. Anes²*

Abstract

Introduction: Jaundice is the most common condition that requires medical attention and hospital readmission in newborns.

Objective: To evaluate the efficacy of oral use of fenofibrate, vitamin- D and other antioxidant vitamins (E and C) in treatment of full-term neonates with indirect hyperbilirubinemia.

Patient and Methods: This is a case control study carried on 80 full-term neonates suffering from neonatal jaundice from January 2015 to May 2016. These neonates were randomly allocated into four groups. Group A; received only phototherapy as controls, group B received single oral dose of fenofibrate suspension in a dose 10 mg/kg beside phototherapy, group C received phototherapy and daily dose of vitamin D (400 IU/24h) and group D received phototherapy, daily dose of vitamin E (4 mg/day) and daily dose of vitamin C(40 mg/day).

Results: Forty-five were jaundiced due to ABO incompatibility, 6 Rh-incompatibility and 29 exaggerated physiological jaundice. The mean duration of stay at hospital of fenofibrate group was 2.6±0.7 days shorter than of controls (5.05±0.9 days) with significant (P-value = 0.001)

Conclusions: In conclusion, addition of single oral dose of fenofibrate in jaundiced baby receiving phototherapy in the first 24hours of treatment can significantly reduce the serum bilirubin levels in term newborns and duration of phototherapy.

Keywords: Antioxidant, Vitamin D, Vitamin E, Vitamin C, Neonatal, Hyperbilirubinemia.