

Determination the relationship between α FP amount and hyperbillirubinemai in 100 icteric term newborns admitted in AliAsghar and Imam Khomeini hospitals in Ardabil

Abstract

Introduction and Objectives: one of the disease which newborns sufferd from in primary days after birth, is jaundice that is because of billirubin collection which produced from metabolism hemoglobin. α FP is a protein secreted from yolksac and liver in fetal period which increased it's amount in pregnancy, some anatomical and chromosomal abnormality, malignancies, and liver diseases and decreased after delivery rapidly. α FP decreased with developed of fetus in fetal period. So it seems that there is probably a relationship between maturation and liver functional development and α FP. The study was an attempt to determine the relationship between α FP amount and hyperbillirubinemia in 100 normal newborns sufferd jaundice

Material & Methods: In this study we choice 100 term newborns sufferd from jaundice which 66 of them was boys and 34 of them girls and all was less than 28 days years old, and only because of high amount of billirubin was in pathologic range, they admitted for phototherapy in AliAsghar and Imam Khomeini hospitals after filling out the questioneirs, α FP was measured after secured their parents agreement. Results analysed by SPSS software.

Results: compare between α FP average amount and age of newborns shows in 1-4 days (518.1 μ g/l) , 5-9 days(515.4 μ g/l),10-14days(530.8 μ g/l), 15-19days(663.2 μ g/l), 20—24 days(285.5 μ g/l) and more than 25 days (689.6 μ g/l), that there was no significant relationship(P =0.21). Compare between α FP average amount and sex shows in female(559.9 μ g/l) and male (509.5 μ g/l) there was no significant relationship(P=0.24). Compare between α FP average amount and on setting jaundice day shows that there was no significant relationship(P=0.1). Compare between α FP average amount and infant billirubin shows that there was no significant relationship (P=0.87). Compare between α FP average amount and the way of delivery shows in NVD (514.5 μ g/l), C/S(543.5 μ g/l), (P=0.48) and compare between α FP average amount and weight of birthing time shows in low than 2500gr(454.6 μ g/l), 2500-4000gr(529.5 μ g/l), more than 4000gr(637 μ g/l) that there were no significant relationship(P=0.24). compare between α FP average amount and Blood groups of newborns show in AB(615 μ g/l), A(481.3 μ g/l), B(65 μ g/l), O(590.8 μ g/l) that there was no significant relationship(P=0.06), compare between α FP average amount and Rh⁺ show that their was no significant relationship(P=0.526)

Conclusion: The results shows that there is no significant relationship between α FP rate and billirubin rate / age /sex/ weight of birthing time/ onsetting jaundice day/ way of delivery/ newborn blood group/ reticulocyte

Keywords: α FP , newborn jaundice, billirubine, Hyperbilirubinemia, Ardabil.