

Comparative Study of Frequency and Severity of Neonatal Jaundice without a Known Etiology in Two Groups of Term Neonate Born Via Cesarean Section and Vaginal Delivery

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Introduction:

Neonatal jaundice has a significant prevalence, and in severe cases, causes permanent neurological Sequela. Many studies have carried out on neonatal jaundice and its predisposing and exacerbating factors. On the other hand, delivery method (cesarean vs vaginal) has been suggested as a predisposing factor for many of neonatal complications in many studies. The aim of this study is to investigate and compare frequency and severity of neonatal jaundice without a known etiology in two groups of term neonate born via cesarean section and vaginal delivery.

Materials and Methods:

Samples included 182 term 7 days old neonates with minimum serum bilirubin of 5 mg/dl. Half of these neonates born via cesarean delivery and half of them born via vaginal delivery. All of these neonates had neonatal jaundice without a known etiology. The data of the two groups was compared with statistical tests.

Results:

Mean serum bilirubin in the neonates was 9.60 mg/dl (SD=3.21 mg/dl). Mann-Whitney test showed that there is not any significant relationship between serum bilirubin value and the delivery method (P=0.53). Bilirubin value in the group with the family history of jaundice in siblings was significantly higher than the group without the family history (P=0.003). Mothers with the age of <20 years had the least serum bilirubin levels (P=0.01). Serum bilirubin level did not have significant relationship with neonatal sex. Neonatal bilirubin levels had a significant relationship with the type of cesarean indications (P=0.01).

Conclusion:

There is not any significant relationship between serum bilirubin level in neonates and type of delivery method (vaginal vs cesarean). However, the results of investigations in this field are controversial and additional studies are recommended.

Key words: Neonatal jaundice, Hyperbilirubinemia, Delivery, Cesarean

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