



Original Article

Common Causes of Neonatal Jaundice –A Study of 100 Cases at Neonatal Unit of Rajshahi Medical College Hospital

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Abstract

A prospective cross sectional study was done at Neonatal unit of Rajshahi Medical College Hospital, from 01/01/15 to 30/06/15 period. Total 100 neonates with jaundice were included in this study. Causes of Jaundice were physiological 35%, sepsis 20%, prematurity 15%, perinatal asphyxia 8%, ABO incompatibility 8%, Rh-incompatibility 5%, unknown 9%.

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Introduction

Hyperbilirubinaemia is one of the most common cause of Neonatal hospitalisation.¹ Jaundice is common in neonatal period. About 50% of neonate develops icterus.² If severe hyperbilirubinaemia is not detected and managed properly it may cause significant morbidity or mortality. For this reason knowledge about etiology and risk factor of neonatal jaundice will be helpful for reduction of neonatal morbidity or mortality. In this study we tried to find out etiology and risk factor of neonatal hyperbilirubinaemia.

Material and Methods

This prospective cross sectional study was done on neonates who admitted into neonatal unit, Rajshahi medical college hospital due to hyperbilirubinaemia or who developed hyperbilirubinaemia after admission. Detailed history including antenatal care, mode of delivery,

H/O perinatal asphyxia, onset of hyperbilirubinaemia, birth weight, feeding history, history of other siblings were taken. Laboratory investigation like CBC, serum bilirubin, reticulocyte count, coombs test, blood grouping of mother and baby, CRP, urine and blood culture were done as needed.

Results

A total of 100 neonates with jaundice were included in this study. Male were 57% and female were 43.71% were delivered by NVD and 29% were delivered by C/S. 77% had birth weight >2.5 kg. 10% babies develop jaundice within 24 hr after delivery. Percentages of exclusive breast feeding, mixed feeding and artificial feeding were 85%, 12% and 3% respectively. Phototherapy was needed in 30% babies. Exchange transfusion done in 3% babies. Causes of jaundice were- physiological 35%, sepsis 20%, PNA 8%,

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prematurity 15%, ABO incompatibility 8%, Rh incompatibility 5% & unknown 9%.

Figure: Causes of neonatal jaundice in studied case (in percentages).

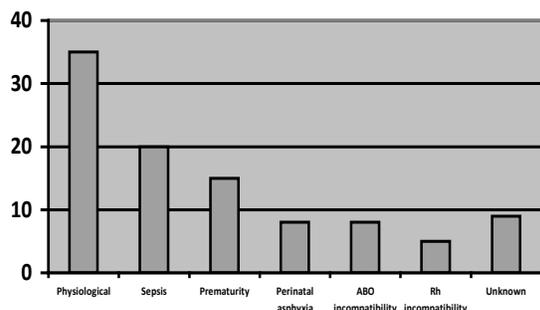


Figure shows most common causes of neonatal jaundice are physiological 35%, sepsis 20%, prematurity 15%.

Discussion

Jaundice is very common in neonate. In most cases it is benign. But in some cases severe hyperbilirubinaemia may cause significant morbidity and mortality. It is assumed that pathological jaundice is responsible in 25% cases.³ In this study 35% cases were due to physiological cause. Pathological causes include sepsis 20% prematurity 15%, others 30%. These are consistent with the study of Khatoon & Islam,⁴ which shows one third physiological, one third due to infection and one third due to other causes like ABO

incompatibility, Rh incompatibility, cephalhaema toma and other causes. Study by Palmar and Drew⁵ showed that prematurity is the commonest cause of pathological jaundice. Our study differs from this finding.

Conclusion

Hyperbilirubinaemia is a common cause of neonatal hospitalization. In most cases is it benign. But if prompt diagnosis and appropriate management is not initiated it can lead to significant morbidity and mortality for neonate.

References

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