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# Type of feeding and efficacy of phototherapy for neonatal jaundice

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Jaundice is one of the most common and annoying problems that occur in the newborn. Jaundice is observed during the first week of life in approximately 60% of term neonates and 80% of preterm neonates. Although most jaundice neonates recover without any complications, there is always a risk of unconjugated bilirubin encephalopathy during the period of hyperbilirubinemia. Our study was done on 90 cases of full term healthy neonates with unconjugated non-hemolytic hyperbilirubinemia and they were divided into three groups as mentioned before. They were selected and subjected in our study to show their different responses to phototherapy. Neonates with unconjugated hyperbilirubinemia who show evidence of hemolysis or required exchange transfusion in their management were excluded from our study. Also neonates who had complications as evidence of sepsis, respiratory distress or hypoxia were excluded. Premature neonates were also excluded from our study. The following investigations were done to the cases of our study:

- Serum bilirubin level (total, direct and indirect) every 48 hour to follow up the response to phototherapy during days of exposure in the three groups. A rebound bilirubin level was done 24-36 hrs. after stopping phototherapy.
- Transcutaneous bilirubinometer: bilicheck non-invasive bilirubin analyzer.
- To exclude hemolysis, the following investigations were done:- Reticulocytic count.- Blood group and Rh factor assessment for the mother and neonate.- Hemoglobin level and Hematocrite value.

Data was collected, tabulated and statistically analyzed. The results of this study revealed that: We found that the better response to phototherapy of those neonates with unconjugated non-hemolytic hyperbilirubinemia was noticed in formula feeding group followed by mixed feeding group and lastly the breast feeding group. There was highly significant (p