Early-term neonate

Early-term neonates (with a gestational age (GA) of 37 and 0/7 weeks to 38 and 6/7 weeks) face higher morbidities, including respiratory and neurodevelopmental issues, than full-term (39 and 0/7 weeks to 40 and 6/7 weeks) infants.

A retrospective study was conducted on neonates born from January 2021-June 2022, excluding those with specific conditions. Evaluated factors included gestational age, birth weight, bilirubin levels, Glucose-6-phosphate dehydrogenase deficiency, and feeding type, with phototherapy given as per American Academy of Pediatrics guidelines. Of 1085 neonates, 356 met the criteria. When stratifying the neonates based on the need for phototherapy, a higher proportion of early-term neonates required phototherapy compared to full-term ($p < 0.05$). After factoring in various risks (GA; birth weight; gender; feeding type; G6PD deficiency; transcutaneous bilirubin levels at 24 h and 24-48 h postpartum; maternal diabetes; and the presence of caput succedaneum or cephalohematoma), early-term neonates were more likely to need phototherapy than full-term babies (OR: 2.15, 95% CI: 1.21 to 3.80). The optimal cut-off for transcutaneous bilirubin levels 24-48 h postpartum that were used to predict phototherapy need was 9.85 mg/dl. In conclusion, early-term neonates are at a greater risk for developing jaundice and requiring phototherapy than full-term neonates. Monitoring bilirubin 24-48 h postpartum enhances early prediction and intervention [1].

1)
Tan TJ, Chen WJ, Lin WC, Yang MC, Tsai CC, Yang YN, Yang SN, Liu HK. Early-Term Neonates Demonstrate a Higher Likelihood of Requiring Phototherapy Compared to Those Born Full-Term. Children (Basel). 2023 Nov 16;10(11):1819. doi: 10.3390/children10111819. PMID: 38002910; PMCID: PMC10670379.