

GENERAL ARTICLE

NEONATAL JAUNDICE : NEW THRESHOLDS, NEW TOOLS AND NEW MODELS OF CARE

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Abstract: Neonatal hyperbilirubinemia is a common problem even today. Bilirubin related brain injury still occurs, especially when early detection and follow-up fail. The American Academy of Pediatrics 2022 update changed routine practice by shifting to a treatment-threshold model and planning follow-up based on the distance from the phototherapy threshold (Δ -bilirubin), with week-specific gestational age curves and a defined escalation-of-care window. Several advances after 2022 are relevant for India, including updated risk framing for G6PD deficiency, better recognition of hemolysis beyond direct antiglobulin test alone, increasing use of rapid point-of-care confirmation and emerging family-centered, home-based phototherapy models. The practical message for Indian settings is that higher thresholds are safe only when objective screening, fast confirmation and dependable follow-up systems are in place.

Keywords: Hyperbilirubinemia, Neonatal jaundice, Phototherapy, Point-of-Care testing, Transcutaneous bilirubinometry, Smartphones.

Points to Remember

- *The safest prevention strategies are simple:*
 - *Measure bilirubin before discharge,*
 - *Plan follow-up based on Δ -bilirubin,*
 - *Confirm high/near-line values with blood testing,*
 - *Deliver truly intensive phototherapy when indicated,*
 - *Treat escalation as an emergency.*
- *Higher thresholds do not mean relaxed care.*
- *Smartphone tools to be treated as screening aids only, not for treatment decisions.*
- *Home phototherapy: should be treated as a supervised care model, not just a device (needs selection, monitoring and escalation plan).*

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