

**Clinical Practice  
Guidelines**

**Screening,  
Prevention and  
Management of  
Neonatal  
Hyperbilirubinemia**

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**Table 1: Summary of recommendations for screening and management of neonatal hyperbilirubinemia**

S. No	Recommendations	Strength of recommendations	Quality of evidence
1.	<p>a. Either the American Academy of Pediatrics (AAP) guidelines based on postnatal age, gestation and presence or absence of risk factors or the National Institute for Health and Care Excellence (NICE), UK guidelines are used for deciding the need for phototherapy and exchange transfusion in neonates of gestation 35 weeks and more).</p> <p>b. Either Maisel's operational thresholds or the NICE, UK guidelines are used in preterm neonates born before 35 weeks of gestation.</p>	Weak	Not graded
2.	<p>Transcutaneous bilirubin (TcB) measurement may be used to screen for hyperbilirubinemia in term and preterm neonates.</p> <p><i>If TcB values fall within 2.9 mg/dL (~50 µmol/L) below or above the age appropriate phototherapy threshold, total serum bilirubin (TSB) should be measured to decide on the need for phototherapy or exchange transfusion.</i></p>	Weak, conditional	Moderate to low
3.	Discontinuation of breastfeeding is NOT recommended either for diagnosis or for treatment of breast milk jaundice in neonates.	Strong	Not graded
4.	Prophylactic phototherapy is not recommended for management of neonates with Rh immunization or ABO incompatibility.	Weak	Not graded
5.	Stable neonates with no other morbidity but having hyperbilirubinemia requiring phototherapy do not need to be admitted in the neonatal intensive care unit (NICU) or special care newborn unit (SCNU) for initiation of phototherapy; phototherapy should be initiated in them by their mothers' side.	Strong	Not graded

6.	Intensive phototherapy using either single or multiple phototherapy devices is to be employed in neonates requiring phototherapy. <i>Multiple phototherapy devices may be preferred when irradiance from a single device is low, or if serum bilirubin rises rapidly or fails to reduce as expected despite phototherapy.</i>	Weak, Conditional	Low to very low
7.	a. There is no role of routine fluid supplementation in neonates under phototherapy.  b. <i>In neonates presenting with severe hyperbilirubinemia and requiring exchange transfusion, intravenous fluid supplementation may be considered while awaiting exchange transfusion. However, exchange transfusion should not be delayed for this purpose, particularly in presence of features of acute bilirubin encephalopathy.</i>	Weak, Conditional	Low to very low
8.	Routine periodic changes in body position – from supine to prone and vice versa – are not recommended in neonates receiving phototherapy.	Strong	Moderate to high
9.	Continuous phototherapy – except for interruptions during breast feeding and nappy changes – is employed in neonates with hyperbilirubinemia requiring phototherapy.	Weak	Low to very low
10.	a. In neonates with bilirubin value near exchange transfusion threshold, total serum bilirubin (TSB) may be measured every 4-6 hours after initiation of intensive phototherapy; once TSB starts declining and is no longer near exchange transfusion threshold, subsequent TSB may be measured every 8-12 hours.  b. A follow-up total serum bilirubin (TSB) measurement may be done 12-24 hours after discontinuation of phototherapy in neonates with features of hemolysis.	Weak	Not graded
11.	Total serum bilirubin (TSB) is preferred over transcutaneous bilirubin (TcB) for monitoring of hyperbilirubinemia during phototherapy or in the first 24 hours after discontinuing phototherapy in term and preterm neonates.	Weak	Very low
12.	Intravenous immunoglobulin (IVIG) is NOT recommended, either prophylactically or	Strong	Very low

	therapeutically, in neonates with hyperbilirubinemia secondary to alloimmune hemolytic disease.		
13.	<p>Phototherapy can be discontinued when TSB value is at least 2.9 mg/dL (nearly 50 <math>\mu</math>mol/litre) below the treatment threshold.</p> <p>A single value below this threshold is sufficient to discontinue phototherapy in neonates with non-hemolytic jaundice; two consecutive values below the threshold are usually required in neonates with hemolytic jaundice.</p>	Weak	Not graded
14.	Albumin priming prior to or during exchange transfusion is not recommended in neonates with hyperbilirubinemia.	Strong	Moderate to low

## Introduction