

Hyperbilirubinemia for Pediatric ED

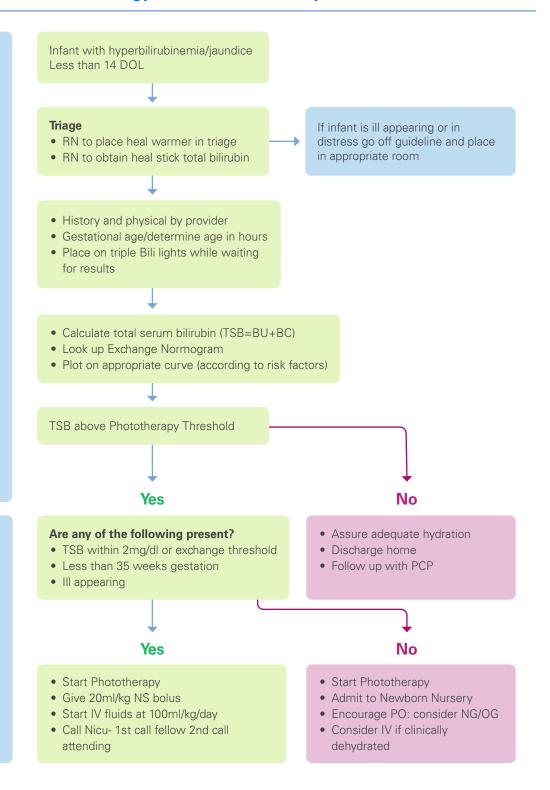
Pediatric Emergency Medicine, Neonatalogy, and Pediatric Nursery

Risk Factors for Developing Significant Hyperbilirubinemia

- Gestational age < 40 weeks Jaundice in 1st 24 hrs after
- Discharge TSB or TcB close to the Phototherapy Threshold
- Hemolysis from any cause, or rapid rate of increase of TSB orTcB:> 0.3 mg/dL per hour in the 1st 24 hrs or > 0.2 mg/ dL per hour thereafter
- Phototherapy before discharge from the birth hospital
- Parent, sibling requiring phototherapy or exchange transfusion
- Family history, genetic ancestry suggest inherited RBC disorder including G6PD deficiency
- Exclusive breastfeeding with suboptimal intake
- Down syndrome
- Macrosomic infant of diabetic mother

Hyperbilirubinemia **Neurotoxicity Risk Factors**

- Isoimmune hemolytic disease
- Other hemolytic diseases, e.g., G6PD Deficiency
- Significant clinical instability in the previous 24 hours: e.g., sepsis, acidosis, asphyxia, significant lethargy, temperature instability
- Albumin < 3.0 g/dL





Hyperbilirubinemia Guideline

Executive Summary

Children's Hospital of Richmond ED Hyperbilirubinemia Workgroup

Pediatric ED Owner: Judy Barto, MD, Pediatric Nursery: Tiffany Kimbrough, MD, Neonatology:

Approved (January 2023)

Chief of Pediatric Emergency Medicine: Medical Director of Neonatology

Frank Petruzella MD, MS Russell Moores, MD

Chief of General Pediatrics

Romesh Wijesooria, MD

CHoR Clinical Guidelines Committee: CHoR Quality Council, Executive Sponsor:

Jonathan Silverman, MD, MPH; Elizabeth Peterson RN, MPH, CPHQ
Ashlie Tseng, MD Matthew Schefft, DO, MSHA

References:

Guidelines Reviewed:

Kemper, Alex R., et al. "Clinical practice guideline revision: management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation." Pediatrics 150.3 (2022).

Bhutani VK, Johnson LH, Jeffrey Maisels M, Newman TB, Phibbs C, Stark AR, Yeargin-Allsopp M. Kernicterus: epidemiological strategies for its prevention through systems-based approaches. J Perinatol. 2004 Oct;24(10):650-62. doi: 10.1038/sj.jp.7211152. PMID: 15254556.

Kuzniewicz MW, Wickremasinghe AC, Wu YW, McCulloch CE, Walsh EM, Wi S, Newman TB. Incidence, etiology, and outcomes of hazardous hyperbilirubinemia in newborns. Pediatrics. 2014 Sep;134(3):504-9. doi: 10.1542/peds.2014-0987. Epub 2014 Aug 4. PMID: 25092943.



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Citation

Title: Spontaneous Pneumothorax

Authors:

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Retrieval website: http://www.chrichmond.org/clinical-guideline-Spontaneouspneumothorax

Example: Children's Hospital of Richmond at VCU. Sulkowski J, Barto J, Spontaneous Pneumothorax Guideline.



Clinical Guideline



This guideline should not replace clinical judgment.

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*Aspiration technique:

- Use pleural pigtail catheter kit to place <12 Fr catheter using Seldinger technique
 - 4th or 5th intercostal space, anterior axillary line
- To evacuate pneumothorax:
 - EITHER use a 60 mL syringe to aspirate air until no more air can be removed
 - OR hook the catheter to a pleuravac and wall suction until bubbling stops
- Get a Chest X-ray
- After confirmation that pneumothorax is resolved (e.g. lung <2 cm from apex of chest, symptoms improved) the pigtail can be clamped/capped
- PEM to consult pediatric surgery prior to pigtail placement (if not emergent) for input on management
- Preferably, PEM will place pigtail catheter, with assistance from pediatric surgery when available or by PEM attending request

