	Document Scope: Hospital-wide Patient Care	
	Document Type: Clinical Practice Guideline Approved on 2021-07-14 Next Review Date: 2023-07-14	
	Inpatient Hyperbilirubinemia Management	Version: 2

Introduction

Hyperbilirubinemia also known as neonatal jaundice is a common condition affecting approximately 60% of term and 80% of pre-term babies in the first week of life ^{1,2}. Hyperbilirubinemia occurs due to the shorter red blood cell lifespan, higher red blood cell concentration and slower metabolism and excretion of bilirubin which leads to higher levels of unconjugated bilirubin circulating ³. In most of these infants the condition will resolve without any need for intervention ⁴. However, for some, there is a risk of developing severe hyperbilirubinemia which can lead to acute bilirubin encephalopathy (kernicterus) ⁴. Severe hyperbilirubinemia has been on the rise in North America and Europe, with increasing frequency in term and near-term infants (Manning D, 2007). The goal of early identification and intervention is to decrease potential morbidity and mortality associated with bilirubin encephalopathy and to minimize disruption to exclusive breastfeeding and parent-child bonding in the neonatal period ³.

This approach for early detection and intervention for hyperbilirubinemia in the newborn is recommended by the Clinical Expert Advisory group for the Ministry of Health and Long-Term Care Quality-Based Procedure on Hyperbilirubinemia in Term and Late Pre-Term Infants, as well consensus from the guideline group.

Purpose:

1. improve early identification of infants at risk for severe hyperbilirubinemia and to decrease potential associated morbidity and mortality;
2. enhance the quality of care delivered by streamlining treatment management;
3. promote exclusive breastfeeding; and
4. enhance appropriate utilization of community resources and ensure appropriate follow up.


Target Patient Population

- previously healthy infants
- age <14 days
- born at or ≥ 35 weeks gestational age

Exclusion Criteria:

- With conjugated hyperbilirubinemia defined as > 18 µmol/L or greater than 20% of the TSB concentration;
- Meeting NICU direct admission criteria for exchange transfusion or IVIG administration;

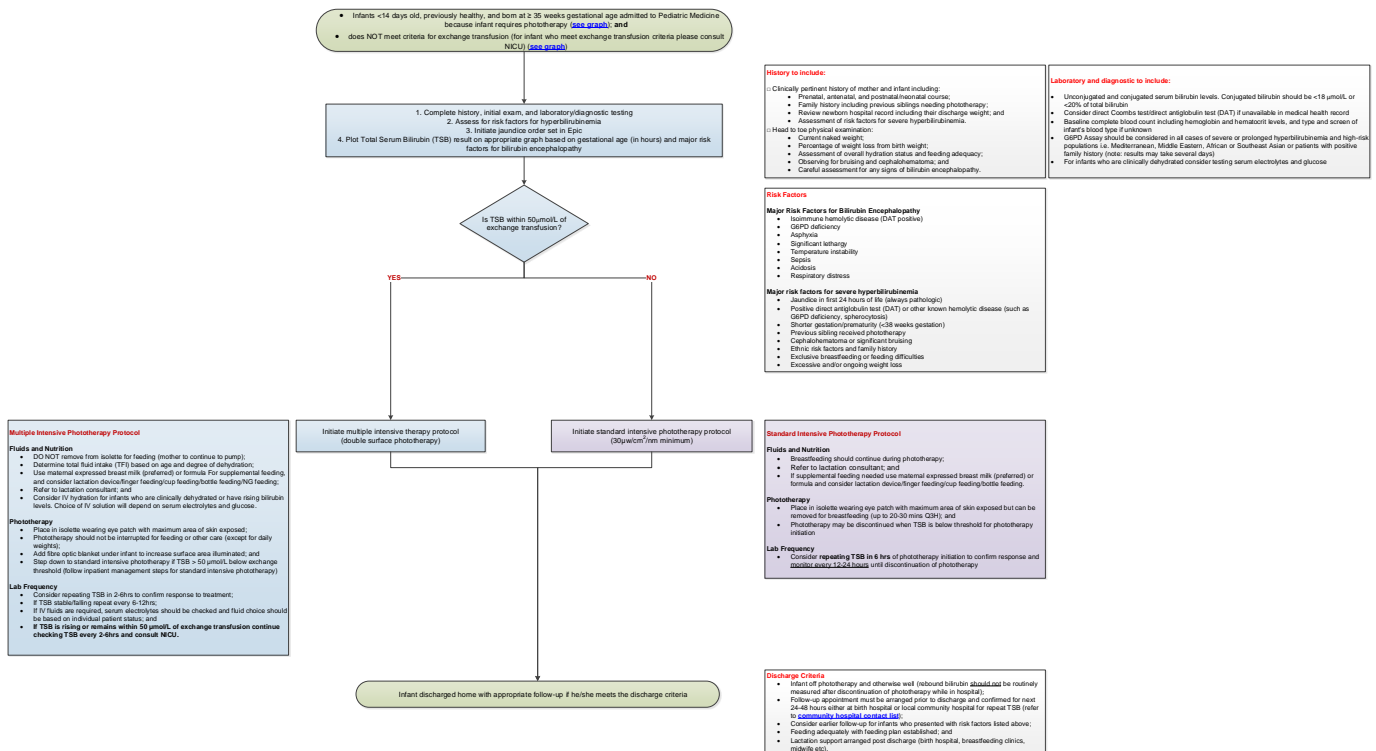
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- With suspected acute bilirubin encephalopathy or displaying clinical findings associated with acute bilirubin encephalopathy such as hypotonia, weak suck or high pitched cry; and
- Suspected sepsis, history of fever or ill-appearing upon assessment.


Inpatient Management of Hyperbilirubinemia management pathway

Inpatient Guidelines for Management of Hyperbilirubinemia



PRINTABLE VERSION OF Hyperbilirubinemia Management Pathway

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Implementation and Evaluation Plan

Implementation Plan

- Inpatient Medical Director to communicate updates in practice to the Division of Paediatric Medicine;
- Resident chiefs to communicate updates in practice to the resident group; and
- Education and awareness building by the guideline group during resident/fellow orientation, resident educational rounds, and nursing orientation/staff meetings/situational bedside teaching

Evaluation Plan

- Monitor average length of stay
- Monitor # of infants admitted with hyperbilirubinemia who had rebound bilirubin level checked prior to discharge

Guideline Group

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References

1. National Institute for Health and Clinical Excellence. (2010). Neonatal Jaundice Clinical Guideline. Retrieved August 2013, from National Institute for Health and Clinical Excellence: www.nice.org/guidance/cg98
2. American Academy of Pediatrics Provisional Committee for Quality Improvement and Subcommittee on Hyperbilirubinemia. (2004). Practice Parameter: Management of Hyperbilirubinemia in the Healthy Newborn. *Pediatrics*, 94(4), 558-565.
3. Fetus and Newborn Committee, Canadian Paediatric Society. Guidelines for detection, management and prevention of hyperbilirubinemia in term and late preterm newborn infants (35 or more week's gestation). *Paediatric Child Health* 2018; 12(Suppl B):1B-12B

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4. Quality-Based Procedures Clinical Handbook for Hyperbilirubinemia in Term and Late Pre-Term Infants (≥ 35 weeks), Provincial Council for Maternal & Child Health & Ministry of Health and Long-Term Care, December 2017.

Attachments:

[care pathway_march 27.pdf](#)

[COMMUNITY HOSPITAL CONTACTS.pdf](#)

[hyperbilirubinemia_intensive phototherapy.pdf](#)

[hyperbilirubinemia_newborn_fig3.pdf](#)

[Isolette Tip Sheet.docx](#)

[Providing Effective Phototherapy_May 26 2020.pdf](#)

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