

# NEONATAL JAUNDICE

(Indirect hyperbilirubinemia)

## What is it?

TSB  $\geq$  95th percentile in GA  $\geq$  35 weeks

Indirect = unconjugated

- Fat soluble
- Crosses BBB  $\rightarrow$  kernicterus

Direct = conjugated

- Dbili  $\geq$  1 or  $\geq$  20% of total
- Water soluble
- Does not cross BBB

## Treatment

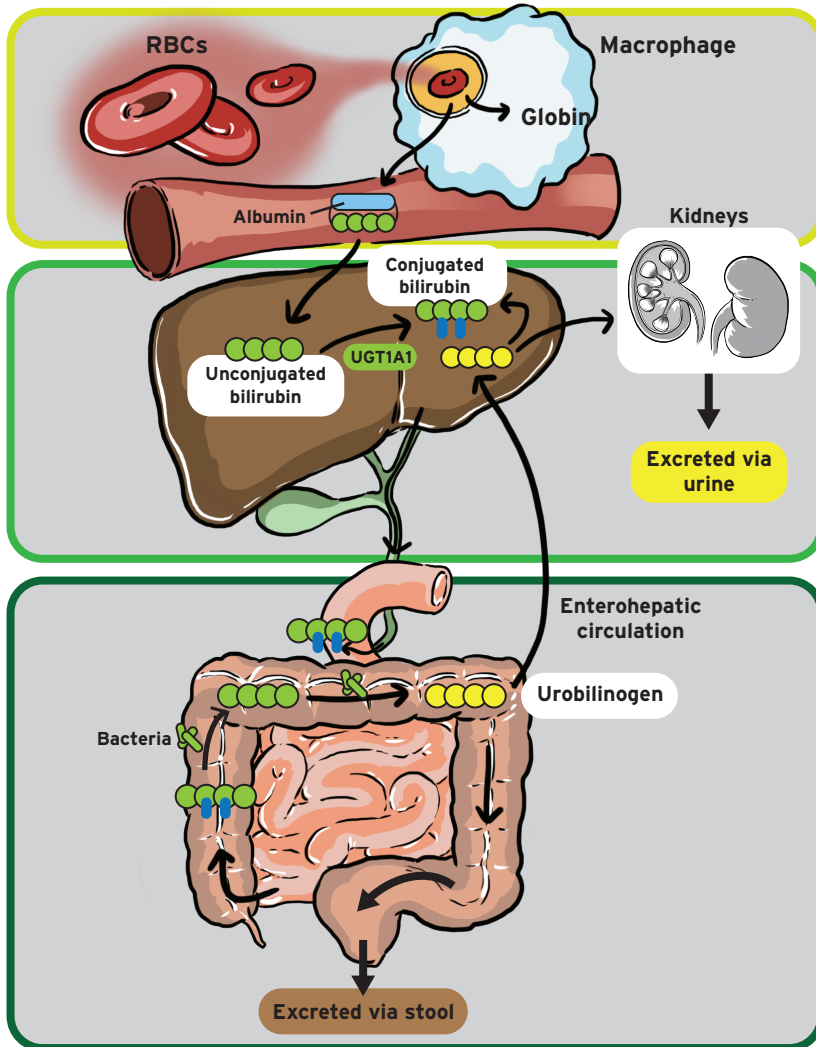
Increase feeding

Phototherapy

Exchange transfusion

Without tx,  
Increases  
risk of

**Kernicterus**



## Increased production

Extravascular

Cephalohematoma  
Bruising

$\rightarrow$  Physical exam

Intravascular

Isoimmune  
ABO, Rh-related

$\rightarrow$  CBC, Coombs (+), blood type

RBC shape or enzyme defect  
G6PD, pyruvate kinase deficiency,  
HgbSS, spherocytosis

$\rightarrow$  CBC, retic count,  
smear, G6PD level

Physiologic polycythemia

## Impaired conjugation

Neonatal low levels of UGT1A1 (UDP-glucuronosyltransferase)

Crigler Najjar or Gilbert (abnormal UGT1A1)

## Impaired excretion

Increased enterohepatic circulation

**Breast feeding jaundice**  
Insufficient supply/feeds  $\rightarrow$   $\downarrow$  stools

**Breast milk jaundice**  
Beta-glucuronidase unconjugates  
bilirubin