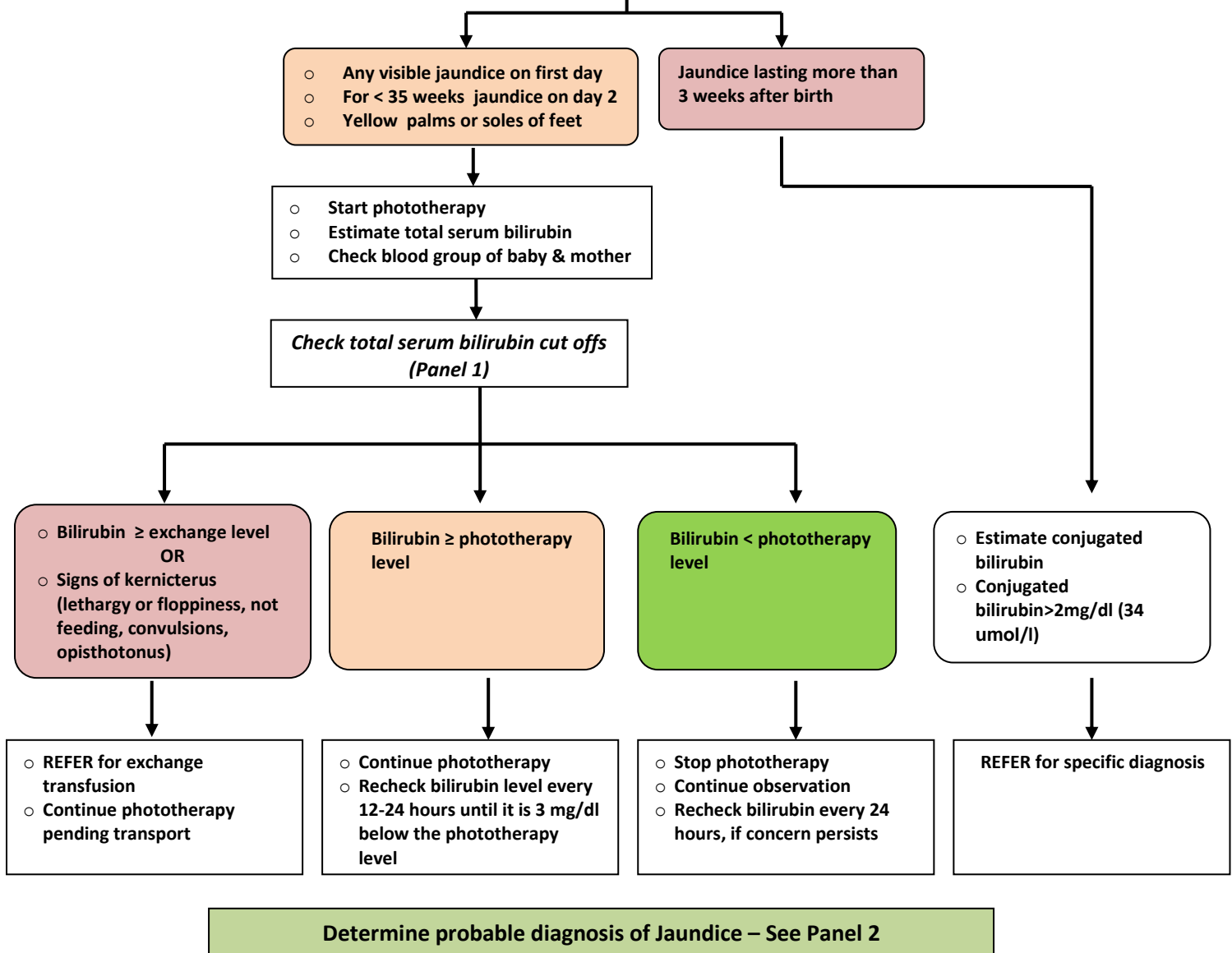


Pathological Jaundice in Newborn



Determine probable diagnosis of Jaundice – See Panel 2

Panel 1: Total serum bilirubin cut offs for phototherapy or exchange transfusion

Age	Phototherapy		Exchange transfusion	
	Healthy babies	Babies with risk factors*	Healthy babies	Babies with risk factors*
Day 1	Any visible jaundice		255 (15)	221 (10)
Day 2	255 (15)	170 (10)	425 (25)	255 (15)
Day ≥3	306 (18)	255 (15)	425 (25)	340 (20)

The values are expressed in $\mu\text{mol/l}$ (mg/dl) in parenthesis

*Gestation <35 weeks or weight <2000 grams, sepsis, hemolysis, asphyxia, sick baby

**Standard Treatment Protocol for management of common newborn conditions in small hospitals
(Adapted from WHO Guidelines)**

Panel 2 Specific Diagnoses and Treatment		
Diagnosis	Counseling and Actions	Treatment
Cephalhematoma/ extensive bruises	Takes 4-6 weeks to disappear	<ul style="list-style-type: none"> ○ Phototherapy, if bilirubin level above the cut-off ○ Exchange transfusion if bilirubin above the cut off ○ Promote feeding optimally
Hemolytic jaundice (ABO or Rh incompatibility, G6PD deficiency; previous family history, hepato-splenomegaly, pallor)	<ul style="list-style-type: none"> ○ Recheck Hemoglobin on follow up 2-4 weeks ○ Anti- D prophylaxis for Rh incompatibility ○ Avoid drugs & chemicals in G6PD deficiency -Sulfas, antimalarial, aspirin, fava beans, mothballs ○ If the cause of jaundice is Rh factor incompatibility, advice mother regarding future pregnancies 	
Prematurity	Frequent feeding	
Neonatal hepatitis	In case of clay or white colored stool , high colored urine staining the clothes, baby needs referral	Need specific management (Referral to higher center)

Panel 3 Tips for delivering safe and effective phototherapy
<ol style="list-style-type: none"> 1. Protect the eyes with eye patches/covers 2. Keep the baby naked with a small nappy to cover the genitalia 3. Place the baby as close to the lights as the manufacturers' instructions allow. 4. Use white cloth or aluminum foil around the light source to reflect light back onto the baby, making sure not to impede the airflow that cools the bulbs 5. Do not place anything over the top of the phototherapy unit. This may block air vents or light and items may fall on the baby 6. Encourage frequent breastfeeding. Unless there is evidence of dehydration, supplementing breastfeeding or providing IV fluids is unnecessary 7. Change position from supine to prone after each feed in order to expose the maximum surface area of baby to phototherapy 8. Keep diaper area dry and clean 9. Phototherapy does not have to be continuous and can be interrupted for feeding, clinical procedures, and to allow maternal bonding 10. Monitor temperature every 4 hours and weight every 24 hours. Giving frequent feeding will prevent excessive weight loss and temperature from rising 11. Measure serum bilirubin every 12-24 hours. Visual assessment of jaundice during phototherapy is unreliable 12. Change tube lights every 6 months (or usage time >1200 hrs) whichever is earlier; or if tube ends blacken or if tubes flicker. Life of Compact Fluorescent lamps is 3000 hours while that of LED bulbs is 30,000 to 50,000 hours