



Shock in Newborn

- Weak & fast pulse (HR>180/min) AND
 - Extremities cold to touch AND
 - Capillary Refill Time >3 sec
- With or without the following signs:
- Colour- very pale
 - Lethargy, not arousable on stimulation

Provide warmth
Secure airway
Support breathing, circulation and temperature
Start oxygen, if saturation (<90%) is low
Measure blood glucose; correct hypoglycemia (Follow STP)

If bleeding is **NOT** the likely cause

- Establish IV access
- Give IV normal saline or Ringer Lactate 20 ml/kg body weight over the first hour
- Give IV 10% Dextrose at maintenance rate
- Treat for Sepsis (Follow STP)
- Continue O2 as required

If bleeding is the likely cause

- Establish IV access
- Give IV normal saline or Ringer Lactate 10 ml/kg body weight over 10 min
- If no improvement, repeat fluid of 10 ml/kg once after 20 minutes as above
- Immediately give a blood transfusion using type O, Rh negative blood
- Give Vitamin K 1 mg IV

Monitor hourly (Panel 2):

- Heart rate, oxygen saturation
- Capillary refill time
- Urine output
- Sensorium

Determine Diagnosis (Panel 1)

If signs of shock improve

- Continue maintenance IV fluid as per weight and day of life (Follow STP)
- Reassess above parameters hourly
- Give specific treatment based on diagnosis (Follow specific STP)

If signs of shock persist

- Continue IV Fluid and O2
- **REFER**

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

Panel 1: Diagnostic clues based on history and clinical examination

Cause	History / Examination
Blood loss	Antepartum hemorrhage Blood loss internal/external Age day 1 <div style="text-align: right; border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">Follow STP on Emergency Management – Sheet A</div>
Asphyxia	Need for Resuscitation for poor respiratory efforts at birth Hypoxic ischemic encephalopathy (See STP for Management of asphyxiated neonates)
Sepsis	Predisposing factors for infection Age > day 3 <div style="text-align: right; border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">Follow STP</div>
Severe dehydration	Loose stool, vomiting, failure to feed + Signs of dehydration
Cardiac	Term baby; normal at birth Age day 3-4 Look for feeble or delayed femoral pulse, cardiac murmur (coarctation of aorta)
Persistent Pulmonary Hypertension of the Newborn (PPHN)	Meconium stained term baby Age day 1-3 <div style="text-align: right; border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">REFER</div>

Panel 2: Monitoring of baby with shock

Signs	At admission	1 hr	2 hr	3 hr	4 hr
Heart Rate/min					
Capillary refill time					
Urine output					
Sensorium					
Temperature difference (core-extremities)					