

Friends, in this webinar, we shall be discussing the strategies for minimising blood transfusions.

Slide 2:

The best way to treat anemia in a preterm neonate is to prevent it.

Slide 3:

The first and foremost strategy to prevent neonatal anemia is delayed cord clamping. It is recommended to delay cord clamping by at least 60 seconds in all term and preterm neonates who do not require resuscitation.

Slide 4:

Delayed cord clamping is associated with reduced need for PRBC transfusions, intraventricular hemorrhage and Necrotising enterocolitis without increase in maternal and neonatal complications. Notably, there is no increase in jaundice requiring treatment

Slide 5:

The second important strategy to reduce need for blood transfusions is to restrict blood sampling losses to as minimum as possible by

1. Doing a blood investigation only when absolutely essential. In this context, we need to remember that routine investigations, such as daily serum electrolytes or weekly blood counts are unnecessary. Do an investigation only when it is expected to influence clinical management.
2. Cluster blood samples wherever possible, such as combining two blood investigations, such as serum electrolytes and C-reactive protein levels in one prick
3. As far as possible, use the minimum volume of blood required for an investigations. For. Eg., , glucose strips can be used in the place of lab sugar levels etc.
4. Follow a standard protocol for frequency of monitoring abnormal biochemical parameters such as 6 hourly monitoring of blood glucose in a hypoglycaemic neonate

Slide 6:

Early iron supplementation in preterm neonates has been found to improve iron stores and may also reduce need for transfusions. Preterm neonates who are on enteral feeding can be safely begun on early iron supplementation of at least 2-4 mg/kg/day from 2 weeks of postnatal age. This decreases the incidence of iron deficiency anemia in early infancy

Slide 7:

Effective and timely use of intensive phototherapy also averts the need for exchange transfusion and reduces exposure to red blood cells. Most importantly, having standard guidelines for blood component transfusions and adhering to it stringently is the most important step towards avoidance of unnecessary transfusions

Slide 8:

To summarise, the strategies to minimise transfusions in preterm neonates are

- Delayed cord clamping
- Minimising blood sampling losses
- Early iron supplementation
- Effective phototherapy
- Standard/ uniform transfusion policy

Thank You!