

Slide 1

Hello friends . In this webinar we will learn about the potential harms resulting from the unnecessary and excessive use of blood products.

Slide 2

Blood transfusion is an important component of treatment in the SNCU and Preterm infants are the ones most frequently transfused .

Blood transfusions we all know have potential harms , especially so in the Preterm infants.

Very importantly these blood transfusions can be avoided or decreased by adopting Standard transfusion guidelines

Slide 3

The harms associated with blood transfusions include :

- 1) Mismatched transfusions that can result from human errors.
- 2) Transfusion transmitted infections like HIV, HBV and HCV. A small but definite risk of acquiring these exists despite the screening that is done . And there are others , as worrisome but for which no screening is done routinely like CMV.
- 3) Risk of acquiring infection due to the procedure per se
- 4) Hyperkalaemia and
- 5) Volume overload which tends to happen due to not accounting for the additional volume transfused

Slide 4

Severe side effects that are peculiar to the preterm infant include

- 1) increased mortality
- 2) Oxygen free radical injury as the preterm has compromised anti oxidant defense and is therefore more vulnerable
- 3) Intraventricular Haemorrhage
- 4) Neonatal Necrotising Enterocolitis and
- 5) Chronic Lung disease

Slide 5

Why is it important to reduce Blood transfusions?

It is important because reduction of transfusion rates has been shown to reduce the incidence of Retinopathy of Prematurity, Neonatal Necrotising Enterocolitis, Intraventricular haemorrhage ,chronic Lung disease and improve outcomes in the preterm infant.

Slide 6

It is therefore very very important to balance the benefits of blood transfusion against the possible harms

Slide 1

Hello friends . In this webinar we will learn about just how important it is to manage jaundice optimally.

Slide 2

Jaundice is a very frequent problem in preterm neonates and upto 80% of them develop Neonatal jaundice

In most cases it can be managed with Phototherapy alone but a few neonates may require exchange transfusion in addition to phototherapy.

Slide 3

Exchange transfusion carries an inherent risk of mortality and morbidity in addition to the usual risks associated with blood transfusions.

Effective use of Phototherapy in the management of Neonatal Jaundice can drastically decrease the need for exchange transfusion

Slide 4

Optimal management of Jaundice includes : Risk stratification and timely identification of those needing therapeutic interventions.

Effective use of Phototherapy would mean:

initiating Phototherapy as per standard guidelines and using the right dose and duration of Phototherapy

It is also important to ensure that these infants are adequately monitored when under phototherapy.

Exchange transfusions must be done only when indicated as per standard guidelines.

And all preterm infants with jaundice must be followed up after discharge for hearing and neurodevelopmental assessments.

Slide 5

And just why is it so important to manage Jaundice optimally?

It is important because adequate and timely treatment of jaundice helps prevent acute as well as long term bilirubin induced neurological injury

Also effective use of phototherapy can prevent the need for exchange transfusion and can therefore prevent the mortality and morbidity associated with this procedure

KEY MESSAGES

- 1) Blood transfusions in preterm neonates must be made only according to standard guidelines
- 2) Phototherapy must be used effectively for the treatment of Neonatal Jaundice and every effort made to prevent the need for Exchange transfusion