

Management of Sepsis

Slide 1

Greetings, in this webinar, we will discuss clinical presentation of different types of sepsis in neonates

Slide 2

We can identify four broad scenarios of sepsis presentation:

1. The baby is asymptomatic i.e. does not have any symptoms at all but there are one or more of perinatal risk factors for EOS
2. The baby has symptoms suggestive of sepsis within 72 hours and there are risk factors as well
3. Symptoms within 72 hours but no risk factors
4. Symptoms after 72 hours

The first three scenarios pertain to EOS and last scenario pertain to LOS. In any of four scenarios- the baby could be in the hospital or at home

Slide 3

Let us examine what are the risk factors.

They are divided into external risk factors such as

Rupture of membrane for >72 hours

Chorioamnionitis

Foul smelling liquor

Other risk factors namely-

Spontaneous preterm labor

Prolonged labor for >24 hours

Unclean PV examination

Slide 4

So what do we do in scenario 1:

If there are external perinatal risk factors namely chorioamnionitis, or foul smelling liquor or ROM for >72 hours: such babies should be started on antibiotics immediately.

If there are other risk factors: these babies should be followed up with examination of vitals and for development of any sign of sepsis every 6 to 12 hours for 72 hours. If the baby develops a sign or symptoms suggestive of sepsis or hemodynamic instability, antibiotics must be initiated.

We should always take blood culture before starting antibiotics in both the circumstances. Perform LP if culture comes positive

Slide 5

In scenario 2:

If there are perinatal risk factors and baby has one or more risk factors- the baby should be started on antibiotics. Perform blood culture before starting antibiotics in both the circumstances. Perform LP.

Slide 6

Now let us examine scenario 3 or 4: that means a symptomatic baby before or after 72 hours of life. As indicated earlier, such baby can be in the homes or already admitted in the hospital for some other reason.

These babies can have one or more of following signs:

- Lethargy, poor feeding

some time a care giver- mother/nurse- may report that 'baby does not look well'. And this can be an early sign of sepsis

- Respiratory distress, apnea
- Fever, hypothermia
- Vomiting, diarrhea, abdominal distension
- Seizures, encephalopathy
- Poor perfusion, shock
- Rare- bleeding, sclerema, renal failure

Slide 7

What do we do in scenario 3 & 4.

Assess the level of sickness in the baby. If the baby is too sick as evidenced by presence of shock, sclerema, bleeding tendency, respiratory failure requiring ventilation, seizures in absence of asphyxia, severe hypothermia, or obvious signs of sepsis such as cellulitis

antibiotics should initiated immediately

However, If not too sick (such as a there is an isolated episode of apnea, occasional vomiting, transient temperature instability, some recued activity, mild tachypnea. In such babies, sepsis screen should be performed and the baby is treated with antibiotics if sepsis screen is positive. If the sepsis screen is negative: alternate cause for symptoms should be looked for and the baby is followed up closely

And again, always take blood culture before starting antibiotics

Slide 8

Key message are therefo

the sepsis can manifest in different ways:

1. The baby can be asymptomatic and perinatal risk factors may be present
2. Symptomatic baby: the symptoms are generally non-specific and can can pertain to any organ system

In a sick baby/significant perinatal risk factor: start antibiotics

In not-so sick baby OR other perinatal risk factors: perform sepsis screen or follow the baby; treat if screen positive/baby becomes symptomatic