Standard in brief

Medical care & clinical practice

Management of suspected early-onset neonatal sepsis (EONS)

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Statement of the standard

Newborn infants with suspected early-onset infection receive prompt diagnosis and effective treatment of sepsis while avoiding overuse of antibiotics.

Benefits

Short-term benefits:

- Reduced mortality and morbidity
- Reduced unnecessary and prolonged antibiotic therapy for suspected infection
- Reduced separation of mother and infant with less interfering of breastfeeding

Long-term benefits:

- Reduced development of multidrug resistance (MDR)
- Reduced alteration of the infant microbiome, with implication for later health

For parents and family

- Parents (at the hospital and at home) are informed by healthcare professionals about signs, treatment and consequences of early-onset neonatal infection.

For neonatal unit

- A unit guideline for suspected EONS is available and regularly updated in conjunction with obstetric guidance on intrapartum prophylaxis.
- Depending on the current rate of neonates started on antibiotics, implementing the sepsis calculator to decrease exposure of antibiotics is considered.
- A unit-based antibiotic stewardship programme is established: minimum for use of ≥3rd generation cephalosporins or carbapenems.

For hospital

- Training on management for suspected EONS is ensured.
- Analysis of blood cultures including determination of antibiotic resistance patterns with daily report of results is conducted.
- Hospital-based antibiotic stewardship programme is established: minimum recording of multidrug resistance (MDR).

For healthcare professionals

- A unit guideline on management for suspected early-onset neonatal sepsis (EONS) is adhered to by all healthcare professionals.
- Training on management for suspected EONS is attended by all healthcare professionals.
- In healthy infants with risk factors for EONS, vital signs are observed and monitored for 24 hours, and infants do not receive antibiotics unless symptomatic.
- Always consider to start parenteral antibiotic therapy if newborn infants have clinical signs possibly related to sepsis.
- An aerobic blood culture (minimum 1ml) is drawn before start of antibiotic therapy.
- The need for antibiotic therapy is re-evaluated after 24-36 hours.
- Antibiotic therapy is streamlined as soon as blood culture results are available.
- ≥3rd generation cephalosporins or carbapenems are not routinely used for empiric therapy.

For health service

- A national guideline on management for suspected EONS is available and regularly updated in conjunction with obstetric guidance on intrapartum prophylaxis.
- Regional/national surveillance and reports of antibiotic resistance patterns of positive blood cultures are available.

european standards of care for newborn health

Here you can access the full standard:
https://newborn-health-standards.org/standards/standards-english/medical-care-clinical-practice/management-of-suspected-early-on-set-neonatal-sepsis-eons/

EFCNI european foundation for the care of newborn infants