Case report - septic arthritis of the knee in a newborn

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Background

Septic arthritis represents an intra-articular infection caused by pyogenic bacteria, being rare in neonates. Delay in diagnosis or treatment may result in irreversible damage to the joint.

Case report

- ♀, 24 days
- 40 weeks, eutocic birth
- Negative maternal serologies (3rd trim)
- Negative b gr. Streptococcus (cultured rectal exudate after 35 weeks of gestation)

Emergency department

- Decreased mobility of the left lower limb
- Intense crying
- No fever, vomiting or diuresis changes

Physical exam

- Left knee: edema, increased temperature and flushing
- Preferably in flexion
- Impaired range of movement

Blood workout:

- 12,900/ul leukocytes (4360/ul neutrophils)
- C-reactive protein 44mg/dl
- Procalcitonin 0.2ng/ml

- Radiography and MRI: Small joint effusion with no signs of osteomyelitis

Septic arthritis ?

Arthrotomy with drainage and lavage

Flucloxacilin (200mg/kg/day)

Cefotaxime (200mg/kg/day)

**+ Multisensitive
group b Streptococcus**

Ampicillin (200mg/kg/day) - 4 weeks

Positive clinical and analytical evolution. C-reactive protein 11mg/dl

Discussion/Conclusion

Septic arthritis in the neonate is a serious condition which could result in permanent dysfunction or deformity of the limbs. Staphylococcus aureus is the most frequent agent but others like group b Streptococcus can cause septic arthritis, particularly at this age. This case reminds that group B streptococcus can colonize birth canal and be negative when searched during pregnancy, so although rare, has to be considered in newborns.