P1128 ETIOLOGY AND FRECUENCY OF RISK FACTOR FOR LATE ONSET NEONATAL SEPSIS IN A IIIb LEVEL NICU

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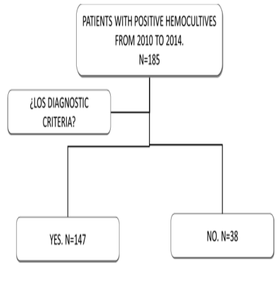
OBJECTIVE

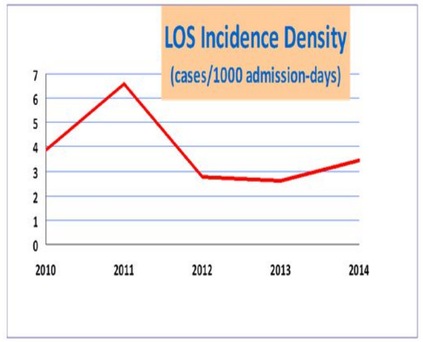
Late-onset sepsis (LOS) is defined as positive results on blood cultures obtained after 72 hours of life (if the patient is admitted for other reason), or after 7 days of life (if not admitted), in the presence of clinical signs or symptoms suggestive of infection. In the first case of this definition, LOS would be an expression of a nosocomial infection, and nowadays it is an important cause of morbidity and death in Neonatal Intensive Care Units (NICUs). The objective of the study is to analyze the presence and duration of the most important risk factors for LOS in neonates with nosocomial sepsis during their admission in our NICU, as well as the etiology and profile of resistances.

PATIENTS AND METHODS

Late-onset sepsis (LOS) is defined as positive results on blood cultures obtained after 72 hours of life (if the patient is admitted for other reason), or after 7 days of life (if not admitted), in the presence of clinical signs or symptoms suggestive of infection. In the first case of this definition, LOS would be an expression of a nosocomial infection, and nowadays it is an important cause of morbidity and death in Neonatal Intensive Care Units (NICUs). The objective of the study is to analyze the presence and duration of the most important risk factors for LOS in neonates with nosocomial sepsis during their admission in our NICU, as well as the etiology and profile of resistances.



RESULTS

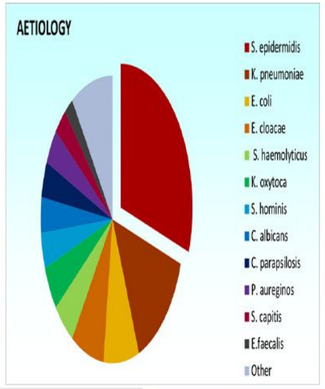


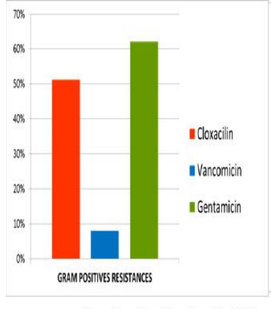
Global LOS incidence: 6 %.

Incidence density: 4 cases /1000 ad-days

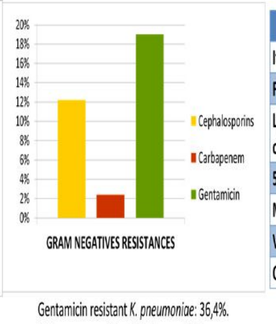
	Median (IQR) or Mean (CI 95%)
Birth weight	1420 g (IQR 990-2310)
Gestational age	31 semanas (IC 95% 23-40,5)
Days of life at begining of LOS	10 (IQR 6-22)
Antibiotic days after LOS	28 (IQR 16-50)
Admission days	39 (IQR 19-63)

Risk factor	n (%)	Days: median (IQR)
Parenteral nutrition	99 (67%)	8 (5-14)
Mechanical ventilation	35 (24%)	7 (5-26)
Central catheter	135 (92%)	10 (6-23)





Cloxacilin resistant *S. epidermidis*: 97,7%
Cloxacilin resistant *S. capitis*: 0%.
Vancomicin resistant *S. hominis*: 33,3%.



Gentamicin resistant *K. pneumoniae*: 36,4%.
Carbapenem resistant *E. cloacae*: 27%
Carbapenem resistant *P. aeruginosa*: 16%
Cephalosporin resistant *E. cloacae*: 27%
Cephalosporin resistant *P. aeruginosa*: 25%.

	C. albicans	*C. parapsilosis*
Itraconazole	83,4%	83,4%
Fluconazole	100%	100%
Lipid formulation of amphotericin	100%	100%
5-Flucytosine	100%	100%
Micafungin	100%	100%
Voriconazole	100%	100%
Caspofungin	100%	100%

FUNGI RESISTANCES

CONCLUSIONS

- The main risk factor for developing LOS was an indwelling venous central catheter, followed by parenteral nutrition administration.
- The incidence density of LOS in our patients was in the superior limit of previously published studies: Gram negatives were more frequent in our study (E. cloacae and K. pneumoniae), and fungi (C. albicans) were not.The most commonly isolated microorganism was S. epidermidis, followed by K. pneumoniae and E. coli.
- In most of our patients, LOS initiates in the first 15 days of admission.
- Cloxacilin and vancomicin resistant Gram positives were more usual than previous studies. On the other hand, Gram negatives resistance to gentamicin, cephalosporins and carbapenems was lower, compared to other centers.

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