

P1170

Paper Poster Session

Epidemiology of brain infections

Perinatal listeriosis: a prospective series from 82 neonates

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Background: Maternal-neonatal listeriosis is a severe foodborne infection responsible for fetal loss and neonatal infection. Features of neonates borne with perinatal listeriosis have not been prospectively evaluated yet.

Methods: Prospective analysis of 82 infants from the French prospective MONALISA cohort born in the context of documented maternal-neonatal listeriosis between November 2009 and July 2013

Results: Eighty-two children with perinatal listeriosis were identified: 33 born at term (40%) and 49 prematurely born (60%). Main characteristics are summarized in Table 1. Clinical symptoms included: respiratory distress (56/82, 68%), hemodynamic dysfunction (38/82, 42%), neurological impairment (26/82, 32%, with hypotonia in 24/82, 29% and seizures in 4/82, 5%), fever (19/80, 24%) and pustular lesions (4/82, 5%). Blood and cerebro-spinal fluid cultures were positive in 31/77 (40%) and 10/58 (18%) cases, respectively. Six infants had late-onset disease (7%): they all presented with culture-positive meningitis developing 7-17 days after uneventful pregnancy and delivery. Only 10 infants borne from infected mothers had normal examination at birth and were considered free of infection (12%). Antibiotics were administered to 76/82 infants (93%). They relied on amoxicillin in all cases, with the addition of aminoglycoside in 61 cases (80%). Ciprofloxacin and vancomycin were also administered in 2 cases (3%). Hyaline membrane disease and intraventricular haemorrhage were reported among 21/47 (45%) and 16/29 (55%) prematurely born cases, respectively. In-hospital death was reported in 4/82 infants borne < 33WG (5%). Hydrocephalus was reported in 2 survivors.

Table 1. Characteristics of neonates

Conclusion

Characteristics	[25-28 WG[N=3	[28-33 WG[N=25	[33-37 WG[N=21	[37-41 WG[N=27	Late-onset disease N=6
Mean weight (g)	940 ± 65	1650 ±260	2375 ± 310	3240 ±490	3750 ±410
Mean hospitalization duration (days)	30 ± 21	29 ± 17	17 ± 7	10 ± 10	15 ± 8
Fever	0/3 (0)	4/25 (17)	4/21 (19)	6/27 (22)	5/6 (83)
Hemodynamic dysfunction	0/3 (0)	15/25 (60)	10/21 (48)	8/27 (30)	1/6 (17)
Acute respiratory failure	2/3 (67)	22/25 (88)	19/21 (91)	11/27 (41)	2/6 (33)
Neurological impairment	0/3 (0)	11/25 (44)	8/21 (38)	6/27 (22)	1/6 (17)
Positive blood culture	1/3 (33)	10/22(42)	11/21 (53)	9/23 (39)	0/6 (0)
Cerebrospinal fluid culture	0/3 (0)	2/21 (10)	1/17 (6)	1/12 (8)	6/6 (100)
In-hospital death	1/3 (33)	3/25 (12)	0/21 (0)	0/27 (0)	0/6 (0)

Mortality of neonates borne with perinatal listeriosis is lower than previously reported (1) (2). Early-onset listeriosis is still associated with significant morbidity.

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