Suppl. Table 1

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| **Author** | **Cohort** | **Aim** | **Follow up** | **Neurodevelopmental (ND) outcome** | **Other outcomes** |
| Del Valle et al(73) | Children <3 years with hPeV sepsis, meningitis or encephalitis (n=16) | To investigate long-term ND follow-up of hPeV infection | ASQ-3 assessment at 18 months and 3 years | 18 months: Mild GMF alterations in 3/16, hypotonia in 1/16, hemiparesis in 1/16.  3 years: 1/16 continued hemiparesis and GMF dysfunction | No differences in motor or cognitive development compared to healthy matched controls over 3-years |
| De Jong et al(60) | Infants <90 days with proven EV/ hPeV-sepsis-illness(n=26) [hPeV(n=4) EV (n=22)] | To investigate cerebral imaging and neurodevelopment up to 1 year after infection in infants who had EV or hPeV-induced sepsis-like illness during their first 90 days after birth. | ND assessment at 6 weeks, 6 months and 1 year | At 1 year: 1/2 hPeV had mild cognitive alterations, 6/18 EV had gross motor delay (5 mild, 1 severe). | Neurological sequelae not more frequent than in general population |
| Van Hinsbergh et al(74) | Febrile children from ED/OPD(n=58) [hPeV(n=11), no pathogen  (n=47)] | Gross motor development in young children during 24 months after hPeV-CNS infection compared with children in whom no pathogen was detected | GMF testing at 6, 12 and 24 months | No association between hPeV-CNS infection and delayed GMF | Not detailed |
| Verboon Maciolek et al(75) | Neonates admitted to NICU with sepsis syndrome (n=32) [EV (n=21), hPeV (n=11)] | To describe clinical signs, laboratory data, CSF analysis, cranial imaging findings, and the neurodevelopmental out- come of infants with hPeV and EV infection | Not detailed | Neurodevelopmental delay secondary to meningoencephalitis [EV(n=1) hPeV(n=3)] | Meningoencephalitis [EV(n=8) hPeV(n=8)]; Myocarditis [EV(n=4)] (1 RIP, 3 long-term cardiac sequelae); Hepatitis [EV(n=3) hPeV (n=2)] (1 RIP, 1 liver transplant) |
| Verboon Maciolek et al(76) | Neonates admitted to NICU with hPeV encephalitis (n=10) | to assess the role of hPeV as a cause of neonatal cerebral infection and to report neuro-imaging findings of neonates with encephalitis caused by hPeVs | ND assessment at term, 6, 15, and 24 months after birth. Longer in those with an adverse outcome | Normal development (n=5) Cerebral palsy (n=1) Learning difficulty (n=1) Epilepsy (n=1) Mild hypertonia (n=1) Lost to follow-up (n=1) | Not detailed |
| Lee et al (77) | Infants <90 days admitted with EV/hPeV meningitis (n=161) [hPeV (n=68), EV (n=93)] | to review the clinical findings and developmental outcomes of infants with hPeV-A and EV meningitis | ND assessment at 6 months, 1 year, and 2 years post-meningitis | At 2 years: ND delay [hPeV (n=3)] (1 speech delay + autism, 2 speech delay). No cases of ND delay in EV meningitis. | Not detailed |
| Hinsbergh et al(29) | Children <3 months with hPeV CNS infection | meta-analysis of 20 studies | Not detailed | 9% had ND delay at long-term follow up | Neurological sequelae in 5% at short term follow-up increasing to 27% at long term follow-up |
| Hudson et al(10) | Children <16 years with viral meningitis | meta-analysis of 14 studies | Not detailed | 2 studies (n=141): no ND delay with hPeV CNS infection. 1 hPeV study (n=77): ND sequelae in 7%. 3 studies: no ND delay with EV CNS inf. | Increased risk of ADHD in EV meningitis described in one study |
| Skram et al(78) | 15 Infants and neonates with hPeV-3 infection | Report of clinical manifestations/virologic aspects of hPeV-3 infected patients | Not detailed | N=1 with significant MRI changes, normal dev at 1yr follow up | Not detailed |
| Khatami et al(39) | 118 infants <12 months with hPeV-3 Infection | Report of clinical manifestations/virologic aspects of HPeV-3 infected patients | ND review of N=1 at 4 months. Gross motor review of N=4 at 6months | Nil ND sequelae identified ( study ongoing) | Not detailed |
| Ferreras Antolin(79) | 106 infants <12 months with hPeV-3+ infection | Epidemiological and clinical Characteristics study of hPeV-3 Infection | Clinical Questionnaire not published | 5 patients with seizure post discharge | Absence of pleocytosis in >90% of infants CSF |
| Vergnano et al(16) | 50 infants with hPeV + Infection | Outcomes and characteristics of hPeV-3 Infection retrospective review | Not detailed | 3/19 followed had sequalae. 6/19 developmental delay | MRI changes on n=10/12 |
| Britton et al(80) | 50 children mean age 41 months at infection reviewed at 3 years of age | Investigation of long term Behavioural and developmental outcomes of HPeV-3 infection | 3 Bayley Scales of infant and toddler dev & child Behaviour checklist | Nil ND sequelae identified | > Behavioural Issues in comparison to healthy controls. |
| Britton et al(81) | N=9 infants confirmed hPeV encephalitis | Clinical Features and outcome of hPeV encephalitis Identified in ACE study | 12 months old review with ages and stages questionnaire | 5/8 followed severe sequelae. 3 with severe CP 2-Gross motor concerns on ASQ | not detailed |
| Britton et al(82) | 46/79 infants (12-16 months) with previous hPeV + infection | Cohort study following neurodevelopmental outcome and QOL post HPeV-3 Infection | ASQ, Peds Ql, SF-12 Telephone questionnaires conducted. | 19% showed significant concern ASQ3 score <2SD) 50% show some concern (<1SD) | ASQ3 associated with lower total Liverpool outcome score and poor health HRQOL in physical functioning. |
| Kadambari et al(12) | 254/666 EV+ patients reviewed, 16/35 hPeV+ reviewed. | Prospective study collecting clinical info on + hPeV, +EV cases children <90days old | Questionnaire (not published ) sent to paediatrician at 12 months | 0.6% of EV+ patients significant neurological sequalae. | not detailed |
| Joseph et al(83) | 77 Infants with hPeV-3 confirmed infections | Study Identifying adverse Neurological outcome in hPeV-3 + infants | not detailed | 11/77 developmental concerns 14%, 2 cerebral palsy, 2 seizures | 20/142 had MRI, 15/20 had imaging abnormalities |

*ND – neurodevelopmental, hPeV – human parechovirus, EV – enterovirus, ASQ-3- Ages and stages questionnaire, GMF-Gross motor function, ED-emergency department, OPD- out-patients department, NICU- neonatal intensive care unit, ADHD- Attention deficit hyperactivity disorder, CP-Cerebral Palsy, QOL- quality of life, Peds Ql- Pediatric Quality of Life Inventory, HR-QOL- Health related quality of life*