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| --- | --- |
|  | N=25 (%) |
| Demographics  Age (mean)  Ethnicity Malay Chinese Others  Gender  Male  Female  Presenting symptoms  Fever  Runny nose  Cough  Vomit  Diarrhoea  Rash  Encephalopathy  Abnormal posture  Seizures  Seizures & Encephalopathy | 7mths-14y (mean 4y)  14 (56)  3 (12)  8 (32)  11 (44)  14 (56)  25 (100)  12 (48)  14 (56)  15 (60) 14 (56) 1 (4)  20 (80)  5 (20)  24 (96)  19 (76) |
| Physical Signs  Shock Hyperpyrexia \*  Impaired GCS on admission  Abnormal posture  Upper motor neuron signs  Pupillary abnormality  Abnormal brainstem signs  ANE severity score  High risk  Medium risk | 16 (64)  20 (80)  21 (84)  6 (24)  22 (88)  6 (24)  11 (44)  22 (88)  3 (12) |
| Immunotherapy  MTP alone  MTP + IVIG  MTP + Tocilizumab  MTP+IVIG+Tocilizumab  First immunotherapy given  MTP  Both MTP &IVIG  Time to first immunotherapy  Within 24 hours from onset of illness Within 24 hours from admission | 2 (8)  13 (52)  4 (16)  6 (24)  20 (80%)  7(28%)  3 (12)  10 (40) |

|  |  |
| --- | --- |
|  | Median (Min,Max) |
| Laboratory findings  (on admission)  Platelets (109 /L)  AST (U/L)  ALT (U/L)  Sodium (mmol/L)  Albumin (g/L)  Protein (g/L)  Globulin (g/L)  LDH (U/L)  CRP(mg/L)  ESR (mm/hr)  Prothrombin time  Partial Thrombin Time  CSF protein ( g/L) (N=15)  CSF cell count (/mm) (N=13) | 204(96,320)  718(20,4565)  560 (14,6404)  138 (131,151)  35 (22,46)  59 (43,81)  25 (19,37)  1370(35,7845)  17.25(0.3,57.5)  7 (1-25)  18.8(11.9-32.4)  55.1(25-140.8)  1.6 (0-8.55)  0-11 |
| Imaging Abnormalities - Thalamus only  - Without brainstem lesion  - With brainstem lesion  Duration of hospitalization (days)  Duration of intubation (days)  mRS at discharge  Death  Severe Disability  Moderate Disability  Mild  mRS at 3 months (N=12)  Severe  Moderate  Mild | 2 (12%)  3 (8%)  20 (80%)  26 (14,180)  5 (0,14)  N=25(%)  9 (36)  10 (40)  5 (20)  1 (4)  5 (45.4)  2 (18.2)  5 (45.4) |

Table 1 Clinical features, ANE severity scores, laboratory and neuroimaging findings of the patients

Note: GCS, Glasgow coma scale; NSAID, non-steroidal anti- inflammatory drugs; ANE, acute necrotizing encephalopathy; AST, aspartate transaminase; ALT, alanine transaminase; LDH, lactate dehydrogenase; CRP, C-reactive protein; ESR, erythrocyte sedimentation rate; CSF cerebrospinal fluid. mRS, modified Rankin score (score <2: mild; 3-4: moderate; 5:severe;6:death)