

**Supplementary Table 1.**

| <b>Sensory and Mixed Nerve conduction studies</b> |                                  |     |                                  |     |
|---|----------------------------------|-----|----------------------------------|-----|
|   | Right                            |     | Left                             |     |
|   | $\mu$ V                          | m/s | $\mu$ V                          | m/s |
| Sural (calf-ankle)                                | absent                           | -   | 33                               | 50  |
| Superf. Peroneal (calf-ankle)                     | 20                               | 50  | absent                           | -   |
| Saphenous (calf-ankle)                            | absent                           | -   | 3                                | 46  |
| <b>Motor Nerve conduction studies</b>             |                                  |     |                                  |     |
|   | mV                               | m/s | mV                               | m/s |
| Common peroneal CMAP (ankle) – (SE on EDB)        | absent                           | -   | absent                           | -   |
| Tibial CMAP (ankle) – (SE on AH)                  | absent                           | -   | 14.4                             | -   |
| <b>Concentric needle EMG</b>                      |                                  |     |                                  |     |
|   | Spontaneous activity<br>Fibs/PSW |     | Recruitment                      |     |
| Right Adductor Longus                             | 4+                               |     | No MUAPs under voluntary control |     |
| Left Adductor Longus                              | 4+                               |     | As above                         |     |
| Right Iliopsoas                                   | 4+                               |     | As above                         |     |
| Right Gastrocnemius                               | 4+                               |     | As above                         |     |
| Left Tibialis Anterior                            | 4+                               |     | As above                         |     |

**Neurophysiological studies and electromyography.** Severe post-ganglionic lesions were demonstrated in the left peroneal division of the sciatic nerve, the right tibial division (including a complete sural nerve lesion), the motor branch of the right peroneal division, as well as the obturator nerves bilaterally (not shown) and the right femoral nerve (not shown). The motor and sensory responses from the upper limbs were normal (not shown). The needle EMG showed complete denervation in both adductor longi bilaterally, the right iliopsoas, the medial head of the right gastrocnemius and the left tibialis anterior. Overall, the neurophysiological findings were consistent with multifocal mononeuropathies.

**Supplementary Table 2.**

| Table of Investigations                      |   |                                |
|--|---|--------------------------------|
| Serological tests (units)                    | Results (on presentation)                               | Normal Ranges                  |
| Full Blood count                             | normal  |                                |
| Renal/liver/bone profile                     | normal  |                                |
| Thyroid profile                              | normal  |                                |
| CRP (mg/L)                                   | 2.2   | 1-5                            |
| LDH (IU/L)                                   | 534   | 135 - 214                      |
| B12 (pg/mL)                                  | 369   | 197-771                        |
| Folate (ng/mL)                               | 4.7   | 2.9-26.8                       |
| ANA titres                                   | negative  |                                |
| ANCA titres                                  | negative  |                                |
| ENA antibodies                               | negative  |                                |
| Rheumatoid factor                            | negative  |                                |
| Anti-CCP antibodies                          | negative  |                                |
| Complement C3 and C4                         | normal levels   |                                |
| $\beta_2$ microglobulin (mg/L)               | 2.8   | < 2.3                          |
| Tissue Transglutaminase & Gliadin antibodies | negative  |                                |
| HIV-1 & 2 Ag/Abs                             | negative  |                                |
| Anti-neuronal antibodies                     | negative  |                                |
| HTLV 1 & 2 serology                          | negative  |                                |
| CMV serology                                 | negative  |                                |
| EBV serology                                 | positive IgG  |                                |
| HBV, HCV, HEV serology                       | negative  |                                |
| Lyme serology                                | negative  |                                |
| Mycoplasma serology                          | negative  |                                |
| Serum Protein Electrophoresis                | No paraprotein; generalised decrease in gamma globulins |                                |
| Serum Free light chain ratio                 | Normal  |                                |
| Immunofixation                               | No paraprotein  |                                |
| Urinary Bence Jones Protein                  | No paraprotein  |                                |
| CSF examinations                             |   |                                |
| Appearance                                   | On presentation: Clear & colourless                     | Repeat: Clear & colourless     |
| Opening Pressure (cmH <sub>2</sub> O)        | -   | -                              |
| WBC  | 2 (lymphocytes)   | 4                              |
| Protein (g/L)                                | 0.68  | 0.72                           |
| CSF/serum glucose ratio                      | 3.2 / 4.8   | -                              |
| OCBs   | negative  | -                              |
| Viral PCR                                    | negative <sup>1</sup>                                   | -                              |
| Cultures                                     | no growth   | no growth                      |
| Cytology                                     | no atypical cells <sup>2</sup>                          | no atypical cells <sup>3</sup> |
| LDH  | within range  | -                              |
| MRI brain with contrast                      | Normal intracranial appearances                         |                                |

<sup>1</sup> Viral PCR panel included: Enterovirus, Herpes simplex virus 1 & 2, Varicella Zoster Virus, Cytomegalovirus, Epstein-Barr virus, JC virus, BK virus, Hepatitis E

<sup>2</sup> Although no atypical cells were seen, there was a predominantly T-cell population present in this cerebrospinal fluid specimen. Immunotyping shows that CD3+5+ T-cells account for 90.2% of lymphocytes and these T-cells are predominantly CD4+ (96.1%). CD19+ B-cells account for 1% of

lymphocytes. Multiplex PCR and capillary electrophoresis is negative for the detection of clonal T-cell receptor beta and gamma chain gene rearrangements.

<sup>3</sup> Few mature CD3+4+5+8-56- T-cells are identified.