|  |  |
| --- | --- |
| **Laboratory investigations for case III: 3**  **CSF:** CSF culture/sensitivity (C/S), CSF for mycobacterium, CSF for genus *Cryptococcus*, genus *Brucella* -PCR, and HSV 1 and 2-PCR tests were performed during the 2nd admission, and were all negative.  **Blood:** Blood C/S was performed on 22 independent occasions (once during the 1st admission and the rest in the 2nd admission) and were negative except for one occasion where it showed growth of *Staphylococcus epidermidis*.  **Sputum:** Sputum C/S was tested during his 2nd admission on 11 independent occasions. The cultures were positive on 4 occasions, where three cultures were positive for *Stenotrophomonas maltophilia*, while the other one was positive for *Klebsiella pneumonia.*    **Urine:** Urine C/S was performed on 9 independent occasions, 2 of which were performed during his 1st admission and were negative. During his 2nd admission, 3 cultures were positive: 1 with yeast, 1 with *Candida albicans*, and 1 culture with mixed gram-positive flora.  **Stool:** Stool C/S testing was performed on 6 independent occasions. One during his 1st admission and 5 times during his 2nd admission, and were all negative.  Additional investigations including serological, chemistry, microbiology and serum paraneoplastic autoantibody are provided in Table S1. Some of the data are presented across multiple time points.  **Table S1** Laboratory investigations for Case III during the 1st and 2nd admissions  **1st Admission** | |
| **Hematology** | |
| **Test** | **Result (Reference Range)** |
| **WBC** | 7.3 x10^9/L (3.9-11.0) |
| **Hb** | 11.7 g/dL (13.5-18.0) |
| **D-dimer** | 0.18 µg/mL (0-0.50) |
| **Platelet Count** | 361 x10^9/L (155-435) |
| **Serology** | |
| **HBV screen** | Negative |
| **Anti-HCV** | Negative |
| **HIV 1 & 2** | Negative |
| **Syphilis screen** | Negative |
| **Brucella IgG** | 0.44 index (0-8.99) |
| **Brucella IgM** | Negative |
| **C3** | 0.87 g/L (0.9-1.8) |
| **C4** | 0.23 g/L (0.1-0.4) |
| **Endocrine** | |
| **Free T4** | 14.1 pmol/L (9.0-19.0) |
| **TSH** | 1.32 mIU/L (0.8-5.5) |
| **Chemistry** | |
| **CRP** | 0.2 mg/L (1.0-3.0) |
| **Creatinine** | 30 umol/L (64-104) |
| **ALT** | 48 U/L (0-55) |
| **ALP** | 154 U/L (89-365) |
| **Phosphate** | 1.6 mmol/L (0.74-1.52) |
| **Lactate** | 2.9 mmol/L (0.5-2.2) |
| **Urea** | 3.4 mmol/L (3-7.5) |
| **Vitamin B12** | 273 pmol/L (138-652) |
| **25 (OH) D** | 56 nmol/L (75-350) |
| **Vitamin E** | 8.1 umol/L (8.8-42.7) |
| **Vitamin A** | 1.2 umol/L (0.5-3.4) |
| **Tumor Markers** | |
| **CA19-9** | 20.7 U/mL (0-37.0) |
| **CEA** | 0.5 ng/mL (0-5.0) |
| **Alpha-fetoprotein** | Normal |
| **LDH** | 216 U/L (125-220) |
| **CA 1-13** | Normal |
|  | |
| **2nd Admission** | |
| **Immunology-Serum** | |
| **HIV 1 and 2** | Negative |
| **QuantiFERON-TB Gold (QFT)\*** | Negative |
| **Brucella IgG** | 0.29 index (0-8.99) |
| **Brucella IgM** | Negative |
| **CMV IgG** | 76.4 IU/mL (0-11.9) |
| **CMV IgM** | Negative |
| **Microbiology** | |
| ***Clostridium difficile*–PCR-Stool (4X)** | Negative |
| **Mycobacterium tuberculosis complex DNA–PCR-CSF** | Negative |
| **CMV DNA-PCR- Plasma** | Not detected |
| **Chemistry** | |
| **CRP (6X)** | 0.57, 9.16, 11.90, 24.30, 4.26, 16.50 mg/L (1.0-3.0) |
| **Paraneoplastic Autoantibody Evaluation-Serum** | |
| **ANNA-1, S** | Negative (<1:240 titer) |
| **ANNA-2, S** | Negative (<1:240 titer) |
| **ANNA-3, S** | Negative (<1:240 titer) |
| **AGNA-1, S** | Negative (<1:240 titer) |
| **PCA-1, S** | Negative (<1:240 titer) |
| **PCA-2, S** | Negative (<1:240 titer) |
| **PCA-Tr, S** | Negative (<1:240 titer) |
| **Amphiphysin Ab, S** | Negative (<1:240 titer) |
| **CRMP-5-IgG, S** | Negative (<1:240 titer) |
| **Striational (Striated Muscle) Ab, S** | Negative (<1:120 titer) |
| **P/Q-Type Calcium Channel Ab** | 0.00 (≤0.02 nmol/L) |
| **N-Type Calcium Channel Ab** | 0.00 (≤0.02 nmol/L) |
| **ACh Receptor (Muscle) Binding Ab** | 0.00 (≤0.02 nmol/L) |
| **ACh Ganglionic Neuronal Ab, S** | 0.00 (≤0.02 nmol/L) |
| **Neuronal (V-G) K+ Channel Ab, S** | 0.00 (≤0.02 nmol/L) |
| \* QuantiFERON-TB Gold (QFT): ELISA-based test to detect mycobacterium tuberculosis. HBV: Hepatitis B Virus, HCV: Hepatitis C Virus, HIV: Human Immunodeficiency Virus, C3: Complement 3, C4: Complement 4, Free T4: Free Thyroxine, TSH: Thyroid-Stimulating Hormone, CRP: C-Reactive Protein, ALT: Alanine Aminotransferase, ALP: Alkaline Phosphatase, 25(OH)D: Total 25-Hydroxyvitamin D, CA 19-9: Cancer Antigen 19-9, CEA: Carcinoembryonic Antigen, LDH: Lactate Dehydrogenase, CA 1-13: Cancer Antigen 1-13**,** CMV: Cytomegalovirus, X: Number of Times the Investigation was repeated on Different Days. S: Serum, ANNA-1, S: Type 1 Antineuronal Nuclear Antibodies, ANNA-2, S: Type 2 Antineuronal Nuclear Antibodies, ANNA-3, S: Type 3 Antineuronal Nuclear Antibodies, AGNA-1, S: Anti-Glial Nuclear Antibody, PCA-1, S: Purkinje Cell Cytoplasmic Antibody Type 1, PCA-2: Purkinje Cell Cytoplasmic Antibody Type 2, PCA-Tr, S: Purkinje Cell Cytoplasmic Antibody Type Tr, Ab: Antibody, CRMP-5-IgG, S: Collapsin Response-Mediator Protein-5- Immunoglobulin G, P/Q-Type and N-Type: Voltage-Gated Calcium Channel, ACh: Acetylcholine, (V-G) K+: Voltage-Gated Potassium Channel. | |