|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | Sex | Age, y | Cause | GCS at hospital admission (subscales) | FOUR at hospital admission | CRS at 3 months(subscales; DOC state) | Structural MRI findings |
| 1 | M | 35 | CA | 6 (1/1/4) | 6 | 9 (2/0/2/2/1/2; VS/UWS) | No abnormality |
| 2 | M | 69 | CA | 4 (1/1/2) | 2 | 4 (1/0/1/1/0/1);VS/UWS) | Diffuse hypoxic-ischemic injury (thalami, occipital lobes, parietal lobes) |
| 3 | M | 62 | CA | 4 (1/1/2) | 2 | 23 (3/2/3/6/5/4;MCS+) | Mild increase in signal in thalami and hippocampi |
| 4 | M | 59 | CA | 6 (1/1/4) | 7 | 8 (2/0/1/1/3/1);MCS-) | No abnormality |
| 5 | F | 46 | CA | 5 (1/1/3) | 5 | 21 (3/2/3/5/4/4;MCS+) | No abnormality |
| 6 | F | 49 | CA | 3 (1/1/1/) | 1 | 6 (2/0/1/1/1/1;VS/UWS) | Diffuse ischemic changes (thalami, occipital lobes) |
| 7 | F | 56 | CA | 5 (1/1/3) | 6 | 8 (2/0/1/2/1/2;VS/UWS) | No abnormality |
| 8 | F | 61 | CA | 5 (1/1/3) | 4 | 13 (2/0/1/4/3/3;MCS+) | High signal in thalami bilaterally |
| 9 | M | 58 | CA | 6 (1/1/4) | 5 | 12 (2/0/2/3/3/2;MCS-) | No abnormality |
| 10 | F | 22 | CA | 6 (1/1/4) | 6 | 7 (2/0/1/2/1/1; VS/UWS) | No abnormality |
| 11 | F | 53 | CA | 5 (1/1/3) | 4 | NA (died) | High signal of the thalami bilaterally |
| 12 | M | 56 | CA | 6 (1/1/4) | 6 | 8 (2/0/1/2/1/2;VS/UWS) | No abnormality |
| 13 | M | 49 | CA | 5 (1/1/3) | 4 | 7 (2/0/1/2/1/1;VS/UWS) | High increase in signal in thalami and hippocampi |
| 14 | M | 78 | CA | 6 (1/1/4) | 7 | 9 (2/0/2/2/1/2;VS/UWS) | Mild increase in signal in thalami and hippocampi |
| 15 | M | 65 | CA | 6 (1/1/4) | 7 | 16 (3/2/3/3/2/3;MCS+) | High signal of the thalami bilaterally |
| 16 | F | 57 | CA | 4 (1/1/2) | 2 | 8 (2/0/2/2/1/1;VS/UWS) | No abnormality |
| 17 | M | 49 | CA | 5 (1/1/3) | 5 | NA (died) | Diffuse ischemic changes (thalami, occipital lobes) |
| 18 | F | 55 | CA | 4 (1/1/2) | 2 | 8 (2/0/2/2/1/1;VS/UWS) | Mild increase in signal in thalami and hippocampi |
| 19 | F | 61 | CA | 5 (1/1/3) | 6 | 12 (2/0/2/3/3/2);MCS-) | High signal of the thalami bilaterally |
| 20 | M | 62 | CA | 5 (1/1/3) | 5 | 12 (2/0/2/3/3/2;MCS-) | No abnormality |
| 21 | M | 58 | CA | 5 (1/1/3) | 5 | NA (died) | Diffuse hypoxic-ischemic injury (thalami, occipital lobes, parietal lobes) |
| 22 | M | 48 | CA | 5 (1/1/3) | 6 | 8 (2/0/1/2/1/2;VS/UWS) | Diffuse ischemic changes (thalami, occipital lobes) |
| 23 | M | 52 | CA | 4 (1/1/2) | 5 | 14 (3/0/2/4/3/2;MCS-) | No abnormality |
| 24 | F | 65 | CA | 5 (1/1/3) | 6 | 10 (2/0/2/2/3/1;MCS-) | High signal of the thalami bilaterally |
| 25 | M | 60 | CA | 4 (1/1/2) | 2 | 7 (2/0/1/2/1/1;VS/UWS) | No abnormality |
| 26 | M | 76 | CA | 5 (1/1/3) | 5 | NA (died) | Diffuse hypoxic-ischemic injury (thalami, occipital lobes, parietal lobes) |
| 27 | M | 42 | CA | 3 (1/1/1) | 1 | 21 (2/2/3/5/5/4;MCS+) | No abnormality |
| 28 | M | 43 | CA | 4 (1/1/2) | 2 | 4 (1/0/1/1/0/1;VS/UWS) | High increase in signal in thalami and hippocampi |
| 29 | F | 38 | CA | 5 (1/1/3) | 4 | 13 (3/0/2/3/3/2;MCS-) | High signal in thalami bilaterally |
| 30 | F | 61 | TBI | 5 (1/1/3) | 3 | 22 (3/2/3/5/5/4; MCS+) | Diffuse axonal injury |
| 31 | M | 35 | TBI | 6 (1/1/4) | 5 | 21 (2/2/3/5/5/4;MCS+) | Cortical contusions (parietal lobes) and ventricular enlargement |
| 32 | M | 59 | TBI | 4 (1/1/2) | 4 | 3 (1/0/1/1/0/0;VS/UWS) | Cortical, brainstem and cerebellar lesions |
| 33 | M | 56 | TBI | 5 (1/1/3) | 5 | 6 (2/0/1/1/1/1;VS/UWS) | Diffuse axonal injury and brainstem lesion |
| 34 | M | 56 | TBI | 6 (1/1/4) | 6 | 15 (3/1/2/4/3/2; MCS-) | Cortical contusions  |
| 35 | M | 43 | TBI | 5 (1/1/3) | 6 | 3 (1/0/1/1/0/0;VS/UWS) | Diffuse axonal injury |
| 36 | M | 20 | TBI | 6 (1/1/4) | 7 | 15 (3/1/2/4/3/2;MCS-) | Diffuse axonal injury |
| 37 | M | 52 | TBI | 6 (1/1/4) | 7 | 8 (2/0/1/2/1/2;VS/UWS) | Brainstem and cerebellar lesions |
| 38 | M | 21 | TBI | 6 (1/1/4) | 5 | 20 (2/2/3/4/5/4;MCS+) | Cortical contusions (temporal lobes) and diffuse axonal injury |
| 39 | F | 58 | TBI | 6 (1/1/4) | 7 | 16 (3/1/2/5/3/2;MCS-) | Cortical contusions (frontal lobes)  |
| 40 | M | 28 | TBI | 3 (1/1/1) | 1 | 8 (2/0/1/2/1/2;VS/UWS) | Cortical microhaemorrhages (frontal lobes) |
| 41 | M | 19 | TBI | 5 (1/1/3) | 5 | 10 (2/0/1/2/3/2; MCS-) | Diffuse axonal injury |
| 42 | F | 31 | TBI | 6 (1/1/4) | 5 | 22 (3/2/3/6/4/4;MCS+) | Cortical contusions (temporal lobes) and subcortical grey matter lesion (thalamus) |
| 43 | M | 25 | TBI | 4 (1/1/2) | 2 | 14 (2/1/2/4/3/2;MCS-) | Cortical contusions (temporal lobes) and diffuse axonal injury |

*Table e-1.* **Demographic data**. Abbreviations: GCS = Glasgow Coma Scale; FOUR = Full Outline of UnResponsiveness; CRS-R = Coma Recovery Scale Revised; VS/UWS = Vegetative State/; MCS (+) = Minimally Conscious State  with command-following, intelligible verbalization or intentional communication; MCS (-) = Minimally Conscious State  without command-following, intelligible verbalization or intentional communication; CA = Cardiac Arrest; TBI = Traumatic Brain Injury; DOC = disorder of consciousness. GCS subscales = eyes opening / verbal response / motor response. CRS-R subscales = arousal / communication scale / oromotor and verbal functions / motor functions / visual functions / auditory functions.