

Figure S1. MRI brain for case 2. (A) T2-weighted MRI, (B) FLAIR, (C) DWI and (D) ADC map demonstrating symmetric cortical swelling with corresponding high T2 and FLAIR signal intensity involving bilateral insular cortex, frontal lobes, parietal lobes, temporal lobes and cingulate gyri with corresponding diffusion restriction. The bilateral occipital lobes and deep grey matter nuclei are spared. At the level of the vertex, (E) T2-weighted image, (F) FLAIR, (G) DWI and (H) ADC map demonstrating similar symmetric cortical swelling with high T2 and FLAIR signal intensities involving the frontal and parietal lobes with corresponding restricted diffusion. The bilateral peri-Rolandic regions are spared. MRI, magnetic resonance imaging; FLAIR, fluid-attenuated inversion recovery; DWI, diffusion-weighted imaging; ADC, apparent diffusion coefficient.

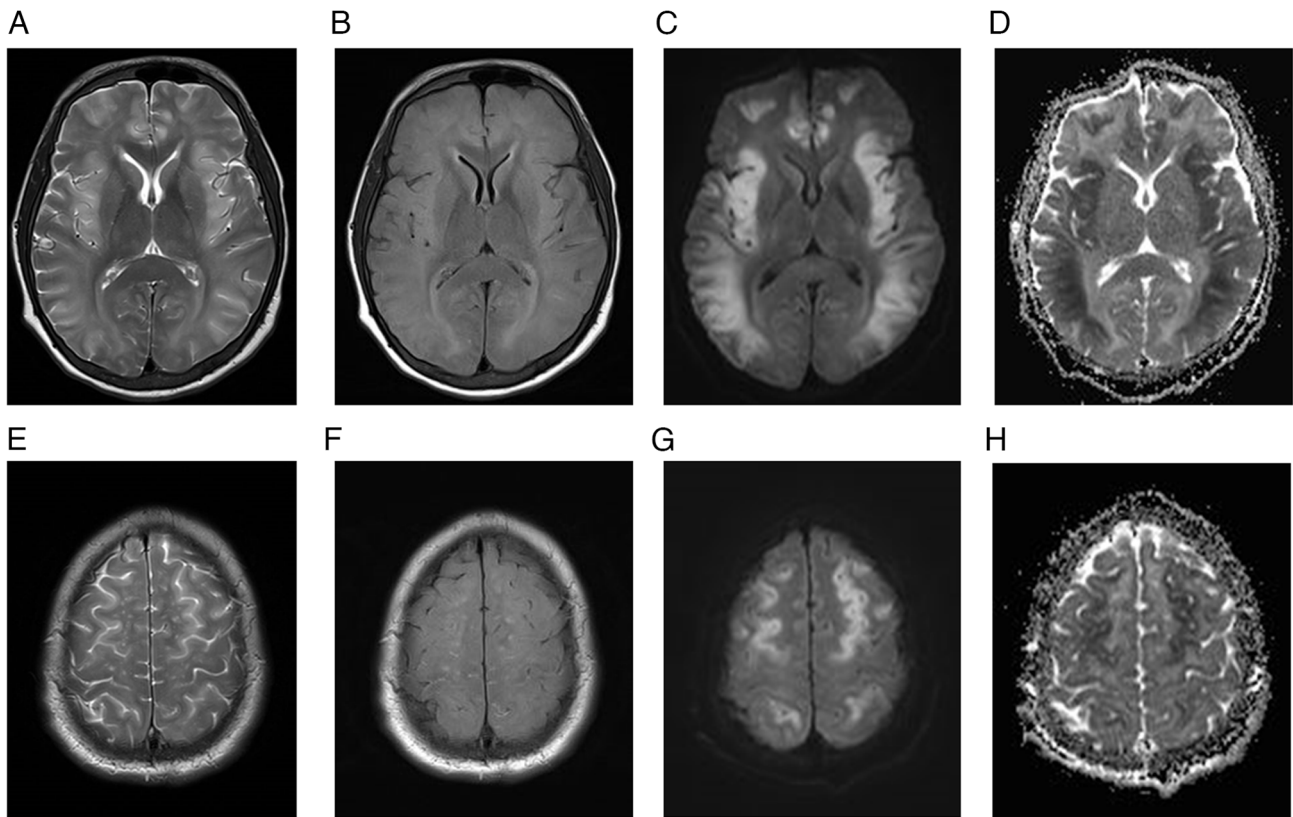


Figure S2. MRI brain scan for case 3. (A) T2-weighted MRI, (B) FLAIR, (C) DWI and (D) ADC map demonstrating symmetric cortical swelling with high T2 and FLAIR signal intensities involving the bilateral insular cortex, frontal lobes, temporal lobes, parietal lobes, cingulate gyri and bilateral lateral thalami, with corresponding diffusion restriction. The bilateral occipital lobes are spared. At the level of the vertex, (E) T2-weighted MRI, (F) FLAIR, (G) DWI and (H) ADC map demonstrating similar symmetric cortical swelling with high T2 and FLAIR signal intensities affecting the frontal and parietal lobes, with corresponding restricted diffusion. The bilateral peri-rolandic regions are spared. MRI, magnetic resonance imaging; FLAIR, fluid attenuated inversion recovery; DWI, diffusion-weighted imaging; ADC, apparent diffusion coefficient.

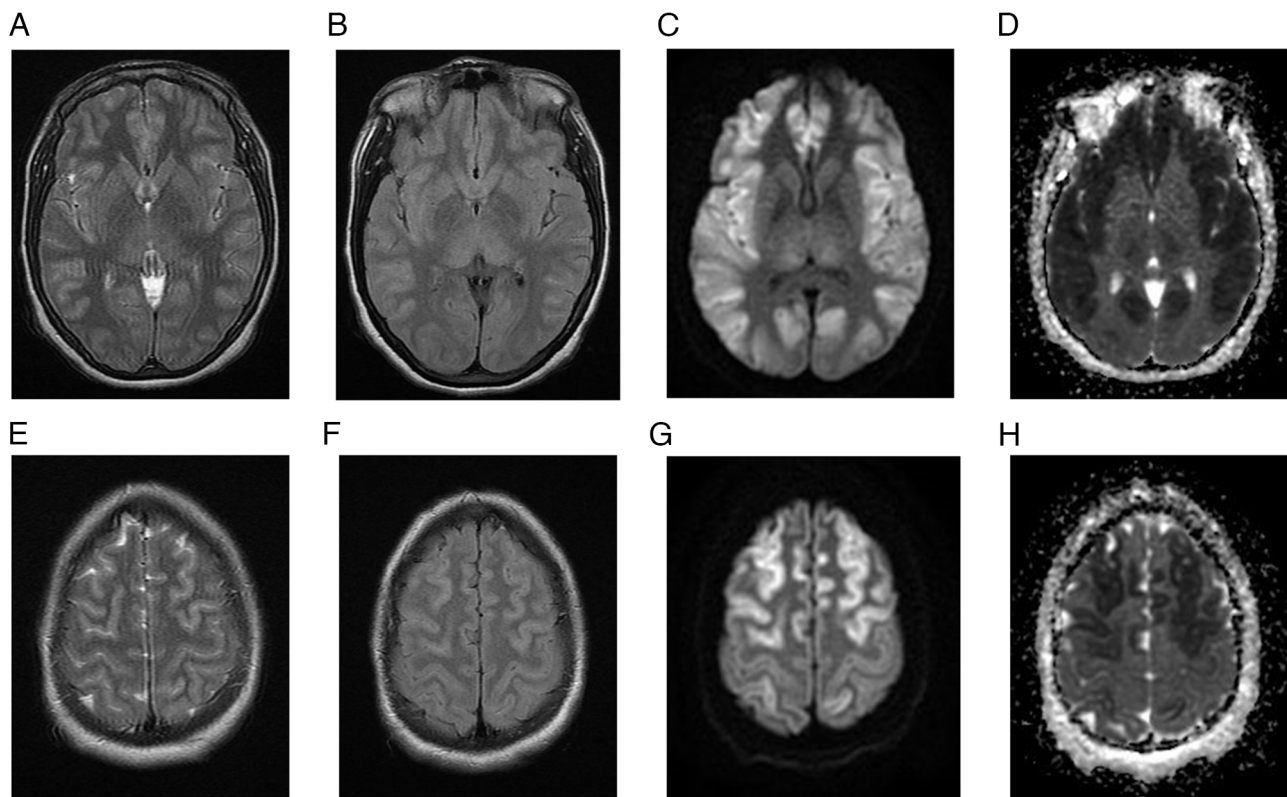


Figure S3. MRI brain scan for case 4. (A) T2-weighted MRI, (B) FLAIR, (C) DWI and (D) ADC map demonstrating symmetric cortical swelling with high T2 and FLAIR signal intensities involving the bilateral insular cortex, frontal lobes, temporal lobes, parietal lobes and cingulate gyri. The bilateral occipital lobes are spared. Foci of high T2 and FLAIR signal intensities are observed in the right anterior thalamus, left globus pallidus and splenium of the corpus callosum, with corresponding diffusion restriction, likely representing ischemic insults. At the level of the vertex, (E) T2-weighted MRI, (F) FLAIR, (G) DWI and (H) ADC map demonstrating asymmetric cortical swelling with high T2 and FLAIR signal intensities involving the frontal and parietal lobes, with corresponding restricted diffusion. The bilateral peri-rolandic regions are spared. MRI, magnetic resonance imaging; FLAIR, fluid attenuated inversion recovery; DWI, diffusion-weighted imaging; ADC, apparent diffusion coefficient.

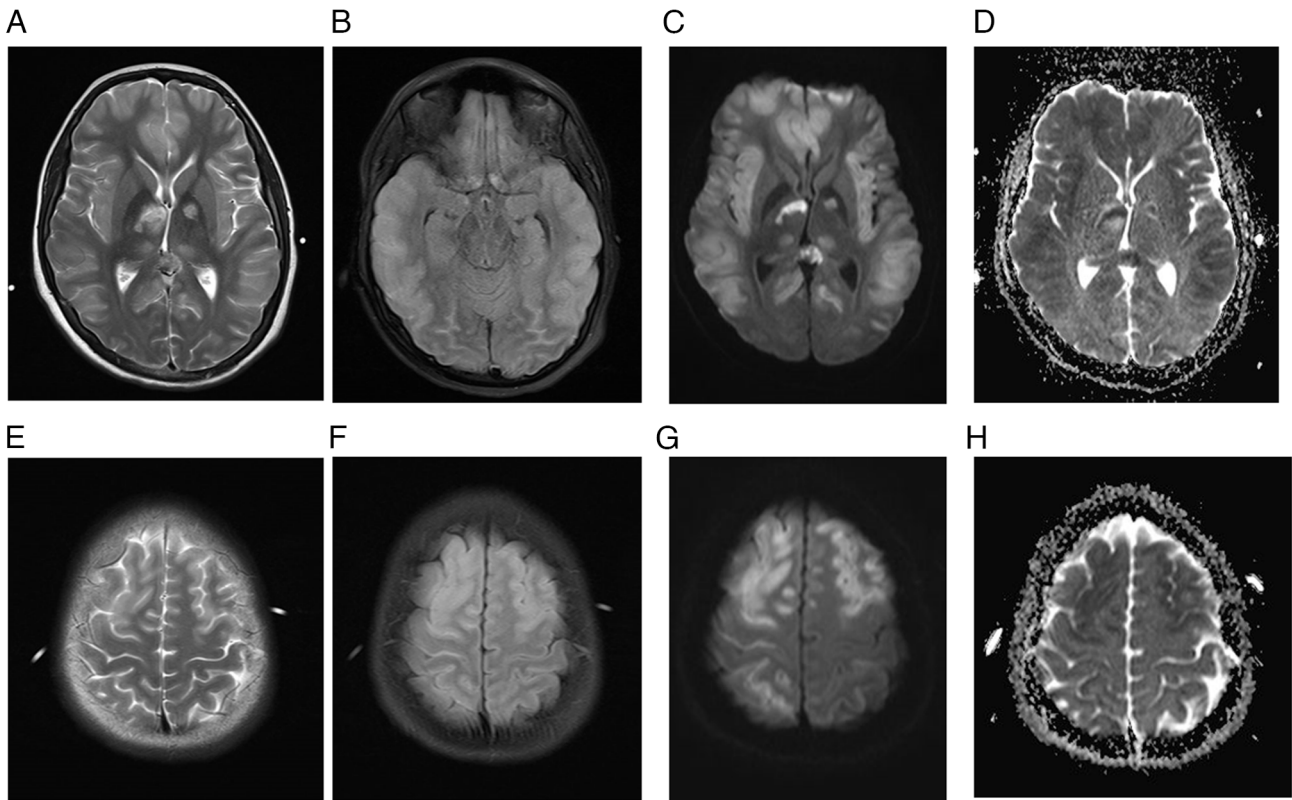


Figure S4. Follow-up MRI brain scan for case 4 after 10 days. (A) T2-weighted MRI, (B) FLAIR, (C) diffusion-weighted imaging and (D) apparent diffusion coefficient map demonstrating interval stability of symmetric cortical swelling, with persistent high T2 and FLAIR signal intensities involving the bilateral insular cortex, frontal lobes, temporal lobes and bilateral cingulate gyri. Regression of diffusion restriction suggests interval evolution of intraparenchymal changes associated with acute hyperammonemic hepatic encephalopathy. Interval regression of high T2 and FLAIR signal intensities, and diffusion restriction in the right anterior thalamus, left globus pallidus and splenium of the corpus callosum, indicate subacute evolution of the ischemic insults. MRI, magnetic resonance imaging; FLAIR, fluid attenuated inversion recovery.

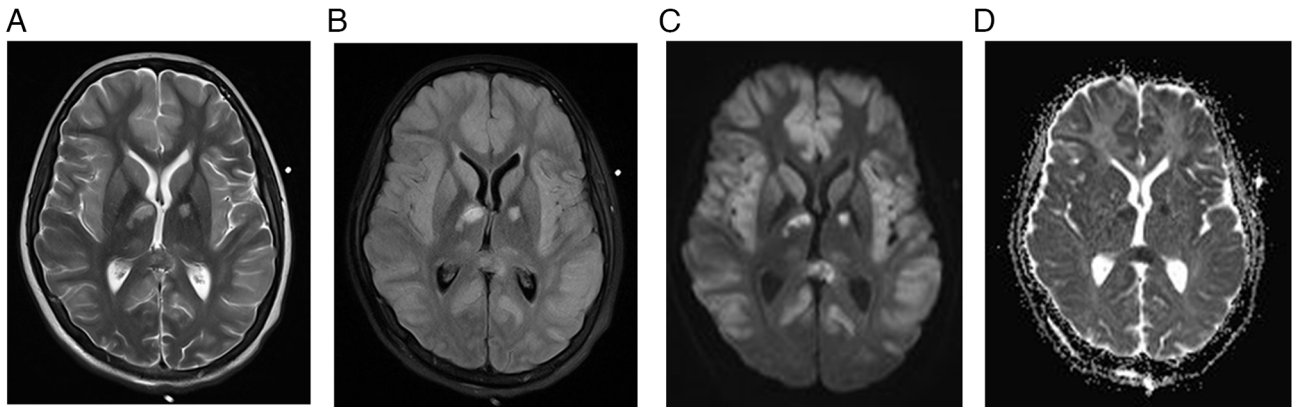


Figure S5. MRI brain scan for case 5. (A) T2-weighted MRI, (B) FLAIR, (C) DWI and (D) ADC map demonstrating symmetric cortical swelling with corresponding high T2 and FLAIR signal intensity involving the bilateral insular cortex, frontal lobes, parietal lobes, temporal lobes and cingulate gyri, with corresponding diffusion restriction. The bilateral occipital lobes and deep grey matter nuclei are spared. At the level of the vertex, (E) T2-weighted MRI, (F) FLAIR, (G) DWI and (H) ADC map demonstrating similar asymmetric cortical swelling, with high T2 and FLAIR signal intensities involving the frontal and parietal lobes, with corresponding restricted diffusion. The bilateral peri-rolandic regions are spared. MRI, magnetic resonance imaging; FLAIR, fluid attenuated inversion recovery; DWI, diffusion-weighted imaging; ADC, apparent diffusion coefficient.

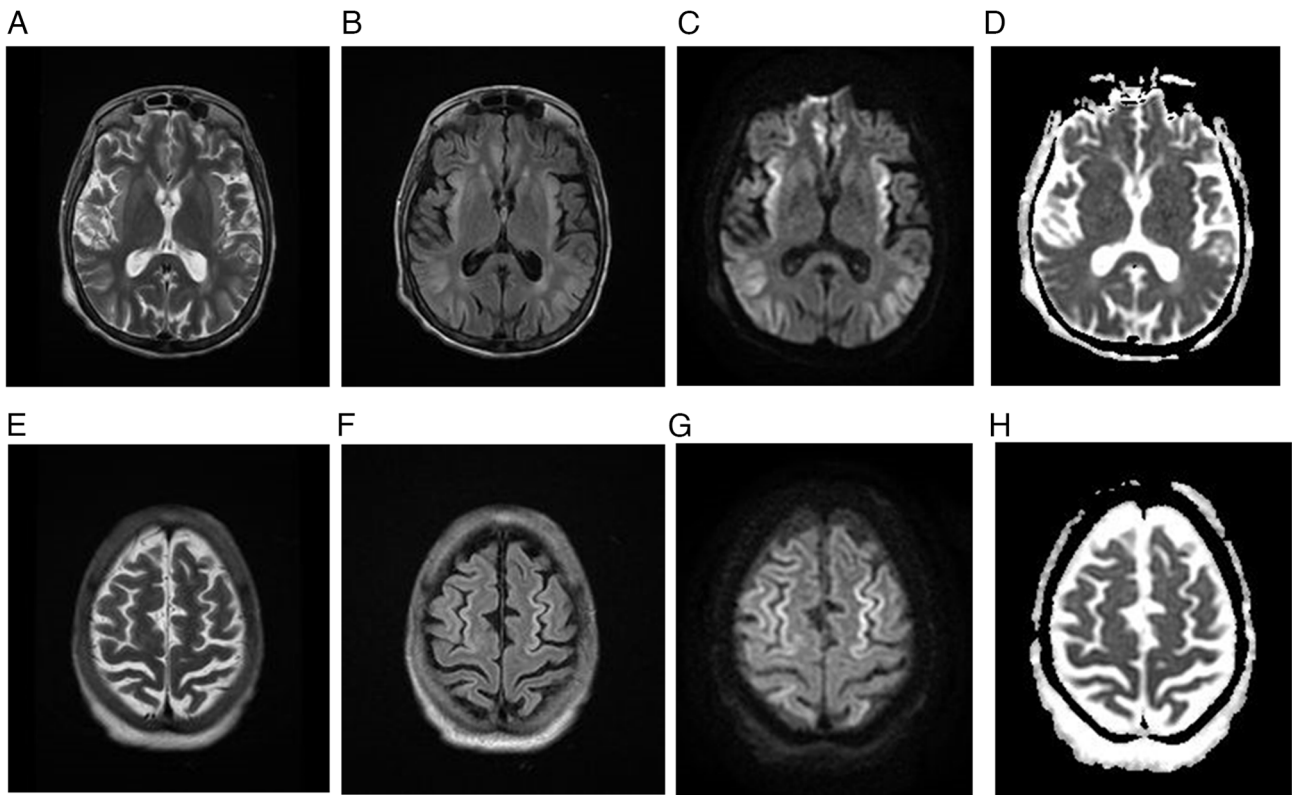


Figure S6. Follow-up MRI brain scan for case 5. (A) T2-weighted MRI, (B) FLAIR and (C) diffusion-weighted imaging demonstrating complete resolution of the cortical T2 and FLAIR high signal intensities, with marked bilateral symmetrical brain atrophy. MRI, magnetic resonance imaging; FLAIR, fluid attenuated inversion recovery.

