**Supplementary Figure 1.** Series of T1-weighted coronal images for each of the six patients and one control. The sections proceed in 7mm intervals from the temporopolar cortex in the top section (with the exception of GW, whose top section is at the level of the perirhinal cortex) caudally through the splenium of the corpus callosum in the bottom section. The left side of the brain is on the right side of each image. Quantitative volumetric data for the brains of four of these patients (all but K.E. and L.J.) appear in Bayley et al. (2005).

As described by Insausti et al. (1998), temporopolar cortex (TP) extends medially from the infratemporal sulcus to the fundus of the temporopolar sulcus. Temporopolar cortex extends rostrally from the tip of the temporal pole caudally to the limen insula (LI), which approximates the border between the temporopolar cortex and perirhinal cortex. Caudal to temporopolar cortex, the collateral sulcus (CS) is the most important structure for the identification of medial temporal lobe cortices. At its most rostral extent, the collateral sulcus is surrounded entirely by perirhinal cortex (PR). Caudally, entorhinal cortex (EC) extends from the midpoint of the medial bank of the collateral sulcus to the subiculum, while perirhinal cortex extends laterally from the midpoint of the medial bank of the collateral sulcus to the inferotemporal cortex. 2 mm caudal to the disappearance of the gyrus intralimibicus of the hippocampus (H), the collateral sulcus is surrounded by parahippocampal cortex (PH). The splenium of the corpus callosum (SP) approximates the posterior border of the parahippocampal cortex and the anterior occipital cortex.

The top section (1) shows the temporopolar cortex. Note that the portion of the temporal lobe missing in G.P. and E.P. corresponds to temporopolar cortex and involves the lateral temporal lobe to a minimal extent (~10%). None of the hippocampal patients has damage
evident at this level. For L.J., only the tip of the temporal pole is visible at this level. For G.W.,
the perirhinal cortex, not the more rostral temporopolar cortex, appears in this section.

The second section (2) shows the perirhinal cortex surrounding the collateral sulcus and
the limen insula, which is the region where the cortex of the insula is continuous with the inferior
cortex of the frontal lobe and is evident only on the right side in the control brain and in G.W.
E.P.’s limen insula is evident bilaterally, but in the other brains it appears caudal to this section.
The third section (3) shows the collateral sulcus and surrounding perirhinal and entorhinal
cortices. For E.P. and G.P., no collateral sulcus or surrounding tissue is evident. The fourth
section (4) shows the anterior hippocampus and the adjacent perirhinal and entorhinal cortices.
The hippocampus is absent bilaterally in E.P. and G.P., and no collateral sulcus or surrounding
tissue is evident. G.W. has extensive damage to the hippocampus at this level. K.E.’s
hippocampal damage is not evident at this level, but small bilateral lesions in the basal ganglia
secondary to toxic shock syndrome are apparent. The lateral temporal lobe appears normal in all
cases, and its volume is always within 1.2 SDs of the volume of the control mean.

The fifth section (5) shows the hippocampus and the adjacent perirhinal and entorhinal
cortices. E.P. and G.P. have no medial temporal lobe tissue at this level. Extensive hippocampal
damage is evident at this level in G.W., K.E. and R.S. The collateral sulcus and the surrounding
perirhinal and entorhinal cortices appear normal in all the hippocampal patients.

The sixth section (6) shows perirhinal cortex on the lateral bank of the collateral sulcus,
near the perirhinal/parahippocampal cortex border. No medial temporal lobe tissue is evident in
G.P at this level. For E.P., some parahippocampal cortex is evident in this section, though it has
an abnormal appearance. Specifically, the collateral sulcus appears dark and wide, and the white
matter lacks its characteristic definition. Also at this level, damage is evident in the hippocampal
region of all the hippocampal patients. Normal-appearing perirhinal cortex is evident in L.J. and R.S., and normal-appearing parahippocampal cortex is evident in G.W. For K.E., the cortex adjacent to the hippocampus (near the perirhinal/parahippocampal cortex border) also appears to be normal.

The seventh section (7) shows the hippocampus and the collateral sulcus, surrounded by parahippocampal cortex. G.P. has little normal medial temporal lobe tissue in either hemisphere. E.P. has some spared parahippocampal cortex bilaterally at this level, though the collateral sulcus is still abnormal in appearance (especially on the right). In addition, the hippocampal patients have moderate damage to the hippocampus at this level, but the parahippocampal cortex appears entirely normal. The warping artifact in the right lateral temporal lobe of G.W. on this section, as well as on sections 8 and 9, does not interfere with the assessment of his damage.

The eighth section (8) also shows the hippocampus and the parahippocampal cortex surrounding the collateral sulcus. E.P. and G.P. both have some spared parahippocampal cortex at this level (G.P. on the right side, E.P. bilaterally). For E.P., the collateral sulcus appears wide on the right. For L.J. and K.E., moderate hippocampal damage is evident at this level. The collateral sulcus and surrounding parahippocampal cortex appear normal in all the hippocampal patients.

The ninth section (9) shows the splenium of the corpus callosum, which defines the caudal border of parahippocampal cortex. At this posterior level, parahippocampal cortex is evident in all patients. For E.P. and G.P., volume reductions were not recorded at this level, but some sulcal widening is apparent. The hippocampus is evident at this level only in L.J., and it appears normal.