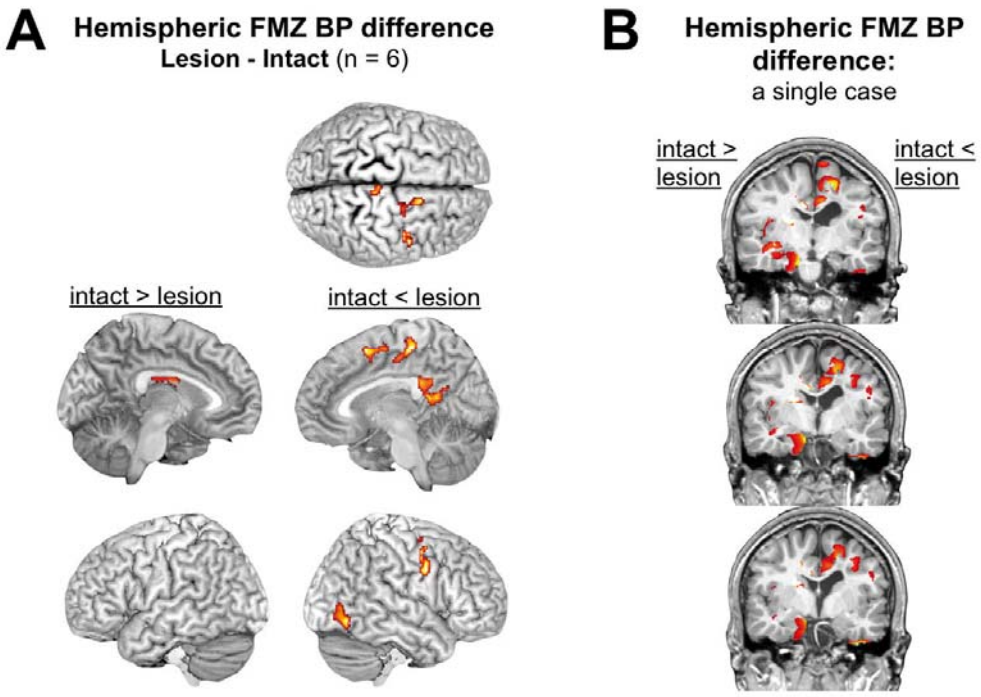
Methods for FFMZ binding potential difference between intact and lesion-side hemisphere.

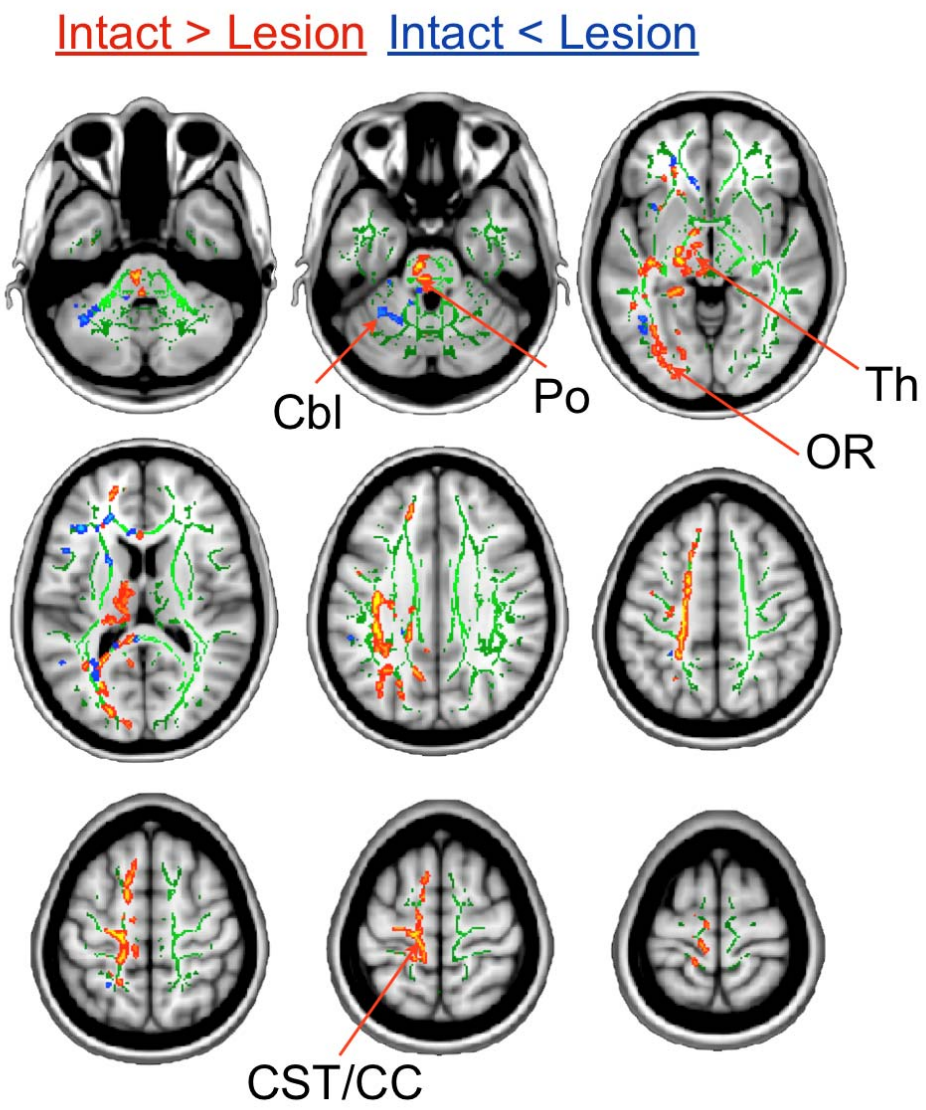
For this analysis, we first flipped the original FFMZ binding potential (BP) and the co-registered T1-weighted MR imaging pairs. Second, we derived a symmetric group MR imaging template by nonlinearly registering both initial and flipped MR images to the template using DARTEL (*1*) toolbox in SPM8 software and averaging these normalized images. Third, we derived nonlinear transformations of both the original and the flipped MR images to the symmetric MR imaging group template, which were applied to transform the coregistered FFMZ BP map into the MNI space. For each voxel, we conducted a paired *t*-test between the normalized FFMZ data and their flipped versions.

REFERENCE

1. Ashburner, J. A fast diffeomorphic image registration algorithm. *Neuroimage.* 2007;38:95–113.



Supplemental Figure 1. Difference of FFMZ binding potential between lesion-side and intact hemispheres in patients with hemiplegic cerebral palsy. (A) Regions of hemispheric difference of binding potential (BP) in patients according to paired *t*-test ($P < 0.005$ uncorrected, cluster size > 50). Red, BP higher than contralateral hemisphere. (B) A patient showing hemispheric FFMZ BP difference according to asymmetric index (Left-Right)/(Left+Right)/2 > 0.1.



Supplemental Figure 2. Difference of fractional anisotropy between lesion-side and intact hemispheres in patients with hemiplegic cerebral palsy. Regions of hemispheric difference of fractional anisotropy in patients according to a paired *t*-test ($P < 0.002$ TFCE uncorrected). Red, lesion-side hemisphere with reduced anisotropy; blue, lesion-side increased anisotropy compared to intact-side hemisphere. CC = corpus callosum; CST = corticospinal tract; OR = optic radiation; Po = pons; Cbl = cerebellum; Th = thalamus.