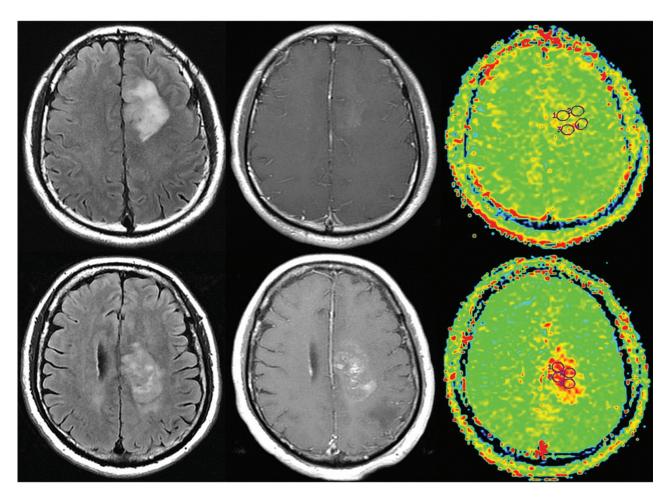


ON-LINE FIG 1. Placement of grids on MR spectroscopy images and APT images. The proton MR spectroscopy imaging postprocessing program FuncTool was used to obtain the parameters of each voxel of interest on the MR spectroscopy image and to record the locations on the anatomic images. Then, the parametric map of APT was calculated and automatically matched with the anatomic images. Grids that came with the postprocessing software were used to segment the APT maps based on anatomic images, and the size and location of the target grid were adjusted to match the MR spectroscopy image.



ON-LINE FIG 2. T2-FLAIR (*left*), TI gadolinium-enhanced (*middle*), and MTRasym(3.5ppm) APT (*right*) images for a patient with a low-grade glioma (*top*) and a patient with high-grade glioma (*bottom*). The ROIs were carefully placed in the solid part of a tumor to include the area with the highest MTRasym(3.5ppm), with care taken to avoid cystic, large necrotic, or hemorrhagic components of the tumor with reference to conventional MR imaging.