

**ON-LINE FIG 1.** A 51-year-old man with adenocarcinoma of the neck and a positive lymph node after radiation therapy and chemotherapy. Axial TI (*A*) and STIR (*B*) images in which a borderline lymph node, with regard to morphologic size, is visualized behind the left sternocleidomastoid (*arrowhead*). In the STIR image (*arrowhead*, *B*), a higher intensity of the lymph node already raises suspicion for metastatic involvement. PET images (*C* and D) and fusion images (*E* and *F*) confirm the suspicion of tumor involvement (*arrowhead*). Focal uptake of the posterior aspect of the larynx is also visualized, but the STIR image shows no pathologic finding to support it, suggesting a physiologic uptake.



**ON-LINE FIG 2.** A 46-year-old man with adenocarcinoma of the salivary gland status post chemotherapy. Axial TI (A) and STIR (B) images in a patient with metastatic lymph nodes. While the TI-weighted image shows the obliteration of the left fatty plane behind the sternocleidomastoid muscle (*arrowhead*), raising suspicion for metastatic involvement, the STIR image allows the identification of 2 enlarged lymph nodes (*arrows*) with suspiciously high intensity. Although PET (*C* and *D*) and fusion images (*E* and *F*) suggest the presence of 2 lymph nodes with high <sup>18</sup>F-FDG uptake, the high soft-tissue resolution of MR imaging facilitates its recognition. Note as well a slightly higher intensity of the adjacent muscle (*dotted arrow*) associated with a minor asymmetry of the <sup>18</sup>F-FDG uptake compared with the right sternocleidomastoid muscle (*dotted arrow*).