Recurrent malignant glioma: detection with $^{131}I$ labeled monoclonal antibody G-22, positron emission tomography and magnetic resonance imaging

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A 45-year-old man with suspected recurrent malignant glioma was evaluated by magnetic resonance imaging (MRI), positron emission tomography (PET) and $^{131}I$ labeled monoclonal antibody G-22 (G-22) scan. Following Gadolinium-DTPA, a T1-weighted spin echo image (TR 500 msec, TE 20 msec) demonstrated a large mass with an irregular margin in the left temporo-parietal area. An $^{18}F$ labeled fluorodeoxyglucose PET study demonstrated marked accumulations in the left temporo-parietal area. Serial $^{131}I$-G-22 scintigraphy was obtained for a week after the injection. The uptake was most increased on the 2nd day after the injection. $^{131}I$ G-22 was specific for tumor-associated antigens.

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