Bland Hepatic Embolization of a Well-Differentiated Neuroendocrine Tumor

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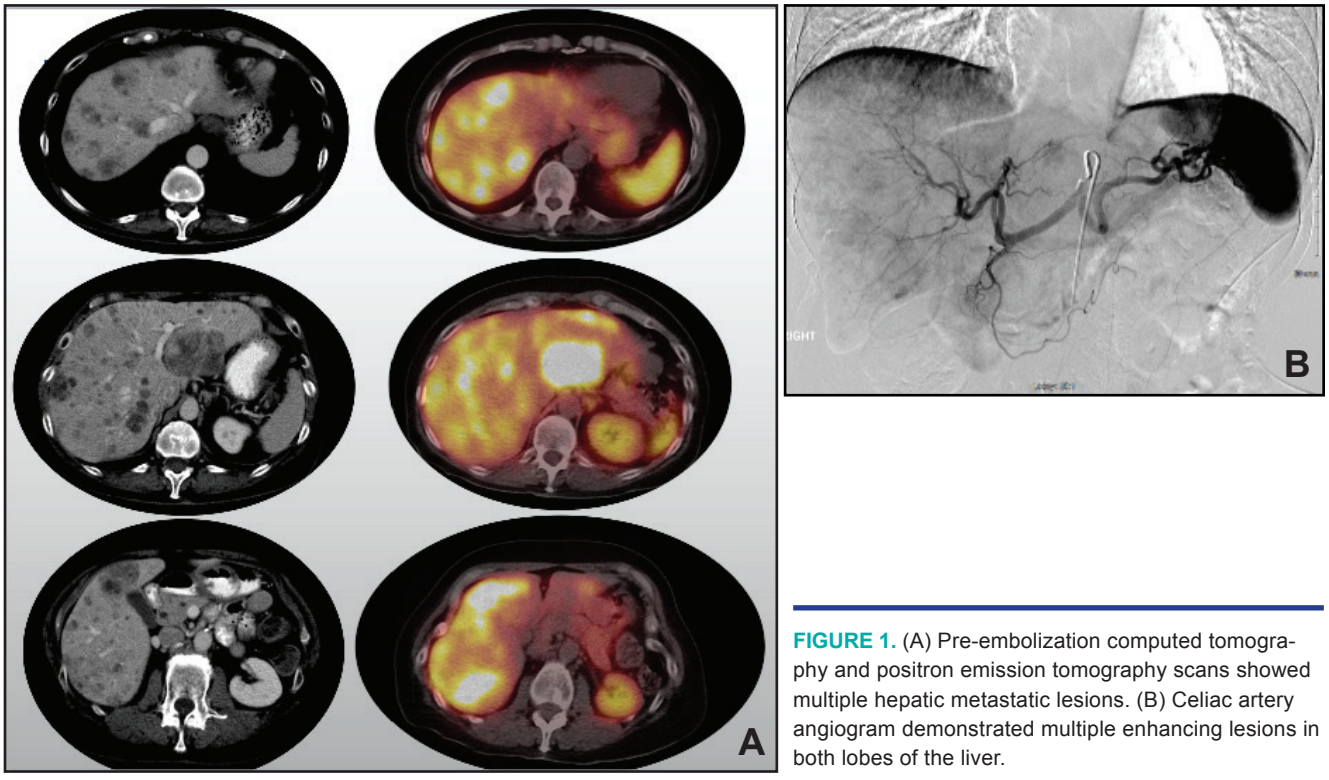

FIGURE 1. (A) Pre-embolization computed tomography and positron emission tomography scans showed multiple hepatic metastatic lesions. (B) Celiac artery angiogram demonstrated multiple enhancing lesions in both lobes of the liver.

CASE STUDY

A 63-year-old woman presented with diarrhea and unintentional weight loss. Positron emission tomography (PET) and computed tomography (CT) of the abdomen and pelvis showed multiple hepatic metastatic lesions and a soft tissue mass along the terminal ileum. Liver biopsy confirmed a low-grade neuroendocrine tumor (antigen Ki-67, 1.9%). She was initiated on octreotide and everolimus. A few months later, a PET-CT scan with Gallium-68 dotatate radiotracer demonstrated a somatostatin-analog avid nodule projecting to the terminal ileum and multifocal sites of intense somatostatin-analog localization within both lobes of the liver consistent with hepatic metastases (Figures 1A and 2A; Video 1). Due to the patient's progressive disease, she underwent bland hepatic embolization (Figure 1B) of the left lobe (Figure 2B; Video 2) using 250 micron Embozene microspheres (Varian Medical Systems) followed by right hepatic lobe bland embolization (Figure 2C; Video 3) using 250 micron Embozene microspheres a few months later. She then underwent resection of the primary site at the terminal ileum, and is now clinically asymptomatic.

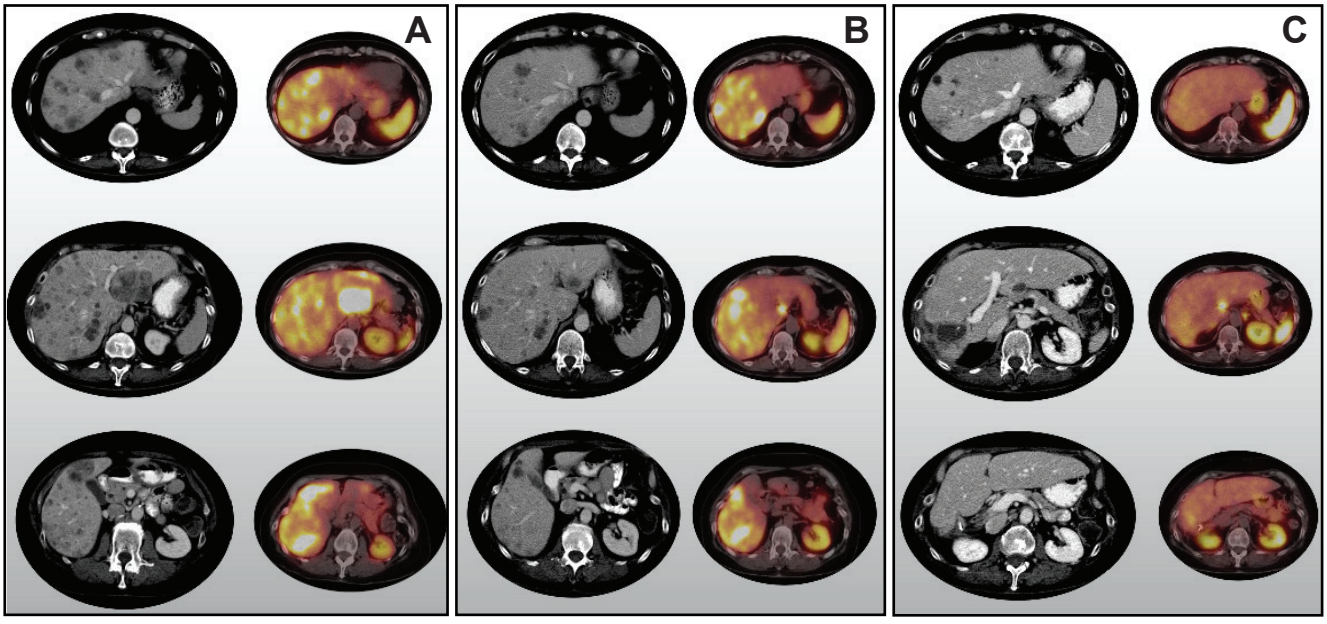

FIGURE 2. Correlation CT and PET/CT pre and post embolization. (A) Multiple metastatic hepatic lesions. (B) Imaging after left hepatic artery bland embolization (RECIST score of left lobe = 82%). (C) Imaging after right hepatic artery bland embolization (RECIST score of right lobe = 54%). *RECIST = response evaluation criteria in solid tumors.*

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The authors report that patient consent was provided for publication of the images used herein.

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