

Radioembolization of a Metastatic Liver Carcinoma Supported by *syngo* iFlow

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Patient history

60-year-old male with liver predominant metastatic carcinoid. Patient previously had bland embolization but now has new disease in segments IV and VIII. Patient referred for yttrium-90 (Y90) microsphere treatment of the right lobe.

Diagnosis

Cross-sectional imaging and planning angiogram demonstrated multiple hypervascular masses with a dominant mass in the right lobe. Right lobe liver volume was calculated from a Large Volume *syngo* DynaCT in an Artis **zeego** interventional suite.

Treatment

Y90 microsphere administration to the right hepatic lobe via a right hepatic artery injection.

Comments

syngo iFlow analysis of matching DSA acquisitions before and after Y90 embolization demonstrates a relative decrease in perfusion within the large right lobe tumor with no visible change in perfusion of the normal portions of liver. In the future, *syngo* iFlow may help interventional radiologists assess the distribution of Y90 to tumor and normal liver.

Examination protocol

Contrast Type	OMNI 350
Contrast Strength	Full
Rate/Rise	0.6
Flow rate (ml/s)	4
Volume (ml)	12
Injection duration (sec)	3.3
Pressure limit (psi)	900
Injection delay (sec)	3.3
Filming rate	¹ / _{sec} , / sec, ² / _{sec} , ¹ / _{sec}

Contact

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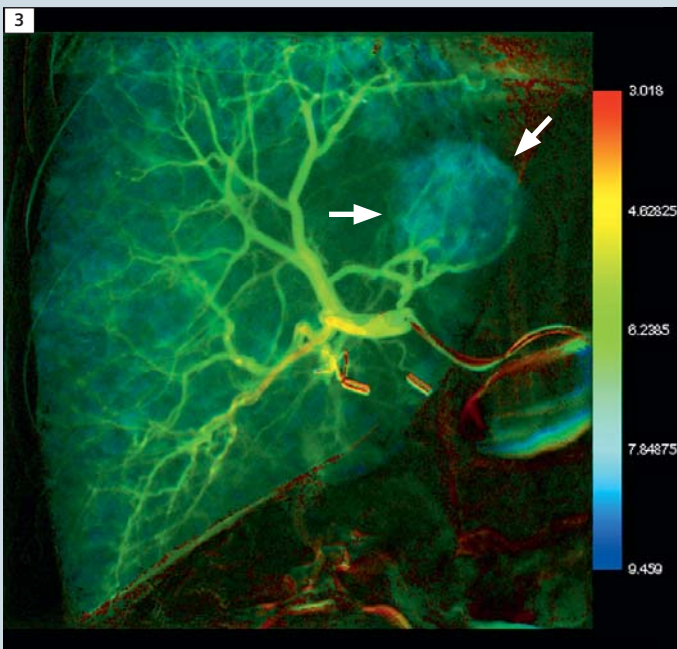
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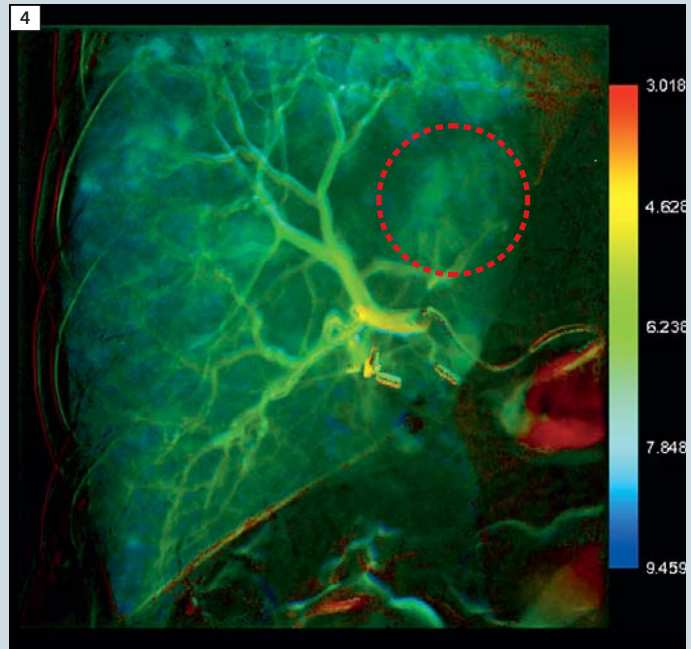
1 Arterial phase VIBE sequence demonstrates a vascular mass in segment IV.



2 Large volume syngo DynaCT confirms the vascular contribution from the right hepatic artery.



3 Pre-treatment: right hepatic syngo iFlow in the AP projection. Note the large mass in segment IV (arrows).



4 Post-treatment: syngo iFlow in the same projection demonstrating the Y90 beads have filled the tumor (dashed circle) but flow to the remainder of the liver appears less affected.