



## Pulmonary Lipiodol Embolism Induced by Transarterial Chemoembolization for Hepatocellular Carcinoma

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### Keywords

Pulmonary lipiodol embolism; Transarterial chemoembolization; Hepatocellular carcinoma

### Clinical Image

A 58-year-old woman with hepatitis B virus-related hepatocellular carcinoma (HCC) was treated by transarterial chemoembolization (TACE). After TACE, the patient developed progressive dyspnea. A chest x-ray showed bilateral interstitial infiltration. Chest computed tomography demonstrated multifocal ground-glass densities and interlobular septal thickening in both lungs, consistent with acute lung injury (Figure 1) and the presence of multifocal, high-attenuation materials in the pulmonary arteries, indicative of pulmonary lipiodol embolism (Figure 2). A chest x-ray obtained at 2 weeks after intensive supportive care showed improved aeration with residual septal thickening. TACE-related pulmonary embolism is a rare but sometimes fatal complication, resulting from chemical damage subsequent to the migration of infused embolic materials to the pulmonary vasculature *via* arteriovenous shunts associated with hypervascular HCC [1]. Peri-procedural monitoring with particular attention might be necessary in patients at risk of pulmonary complications. In such a case, temporary balloon occlusion of the hepatic vein before TACE should be considered.

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Figure 1: Lung window of chest computed tomography showing multifocal ground-glass densities and interlobular septal thickening in both lungs.

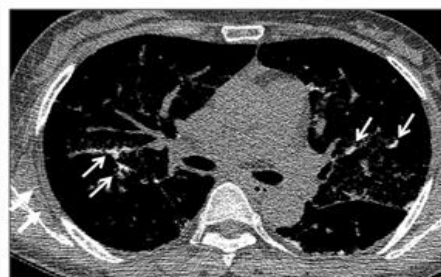


Figure 2: Soft-tissue window of chest computed tomography showing multifocal and high-attenuated materials (arrows) in the pulmonary arteries.

### References

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