Teaching NeuroImages: Cerebral liposuction

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A 61-year-old woman showed left hemiplegia and neglect while recovering 6 hours after aortic valve repair. CT showed a hypodense middle cerebral artery segment. CT angiography and CT perfusion (CTP) revealed a carotid terminus occlusion and a large penumbra around a small ischemic core. This prompted cerebral angiography, and embolectomy by Sofia catheter aspiration removed a 1.5-cm piece of adipose tissue, presumably pericardial fat introduced during aortotomy (figure). The neglect, hemianopia, and hemiparesis improved thereafter. This demonstrates a successful fat embolus aspiration to treat stroke after cardiac surgery, and which should be considered if deficits are recognized early and CTP shows significant salvageable tissue.[1,2]

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Author contributions

Kevin Gobeske: study concept and design, acquisition of data, analysis, interpretation, and writing. Simon Maltais: acquisition of data, analysis and interpretation. Harry Cloft: acquisition of data. Eelco Wijdicks: study concept and design, acquisition of data, analysis, interpretation, and writing.

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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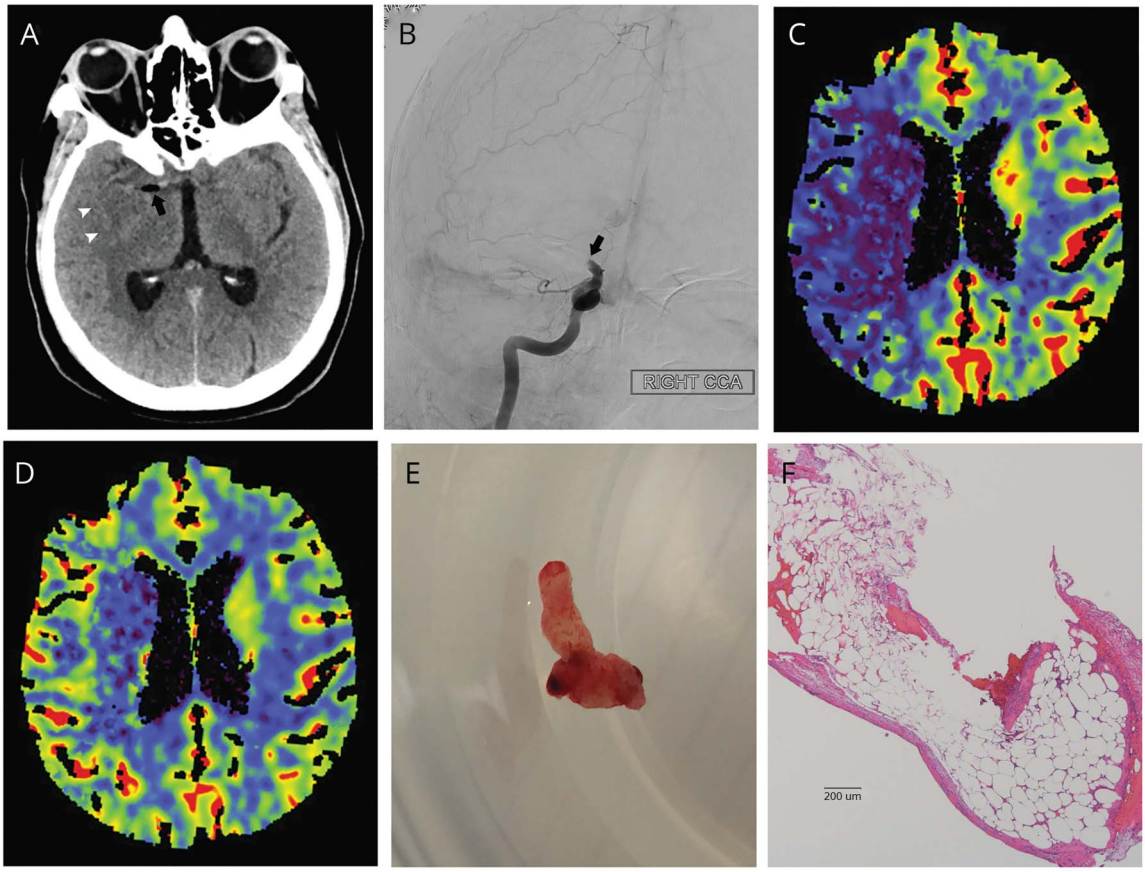
Figure Fat embolus aspiration to correct an acute right middle cerebral artery stroke after cardiac surgery



(A) CT with hypodense middle cerebral artery (arrow) and limited early ischemia (arrowheads). (B) Cerebral angiogram with ICA occlusion (arrow). (C) CT perfusion (CTP) blood flow scan shows large ischemic penumbra. (D) CTP blood volume scan shows small ischemic core. (E) Embolectomy gross pathology and (F) 40× hematoxylin & eosin stain photomicrograph demonstrate adipose tissue.