Three-Dimensional Visualization of Pulmonary Thromboemboli in Chronic Thromboembolic Pulmonary Hypertension With Multiple Detector-Row Spiral Computed Tomography

Dominik Fleischmann, MD; Christine Scholten, MD; Walter Klepetko, MD; Irene M. Lang, MD

A 36-year-old man experienced new-onset dyspnea on exertion. His previous medical history was unremarkable except for a motorcycle accident 16 years ago with multiple fractures of his right leg requiring surgery. Echocardiography showed severe right heart enlargement with impaired right ventricular function in the absence of intracardiac shunts or valvular heart disease. Venous duplex scanning demonstrated old organized thrombus in the right popliteal and femoral veins. Hemodynamic evaluation at rest disclosed pulmonary hypertension with a pulmonary vascular resistance of 600 dynes\(\cdot\)s\(\cdot\)cm\(^{-5}\). Selective digital subtraction angiography showed irregular contours of the central pulmonary arteries, filling defects, and pruning of smaller, subsegmental arteries (Figure, A). Contrast medium–enhanced multiple detector-row (or multislice) spiral CT with 3D rendering clearly demonstrated the organized thromboembolic masses, thus confirming the diagnosis of chronic thromboembolic pulmonary hypertension (Figure, B). The patient underwent a successful bilateral pulmonary thromboendarterectomy, yielding 25 g of whitish-reddish, partly organized thromboembolus (Figure, C), with subsequent normalization of pulmonary hemodynamics and exercise capacity.
Three-Dimensional Visualization of Pulmonary Thromboemboli in Chronic Thromboembolic Pulmonary Hypertension With Multiple Detector-Row Spiral Computed Tomography

Dominik Fleischmann, Christine Scholten, Walter Klepetko and Irene M. Lang

_Circulation._ 2001;103:2993
doi: 10.1161/hc2401.092322

_Circulation_ is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2001 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/103/24/2993

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in _Circulation_ can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to _Circulation_ is online at:
http://circ.ahajournals.org//subscriptions/