A 25-year-old man presented with a 3-month history of recurrent syncope, exertional chest discomfort, and shortness of breath. On physical examination, he had right ventricular heave, loud P2, jugular venous distension, tricuspid regurgitation murmur, and lower extremity edema. D-dimer was negative. Echocardiography showed right ventricular hypertrophy with elevated right ventricular pressure. Left ventricular function was normal. Cardiac catheterization showed pulmonary artery pressure of 131/50/78 mm Hg (concurrent aortic pressure was 145/80 mm Hg). Pulmonary wedge pressure was 15 mm Hg. Pulmonary angiography showed dilation of the main pulmonary artery with peripheral tapering (Figure 1). After pulmonary angiography, optical coherence tomography (LightLab Imaging Inc, Westford, Mass) and intravascular ultrasound (Boston Scientific) were per-
formed. Optical coherence tomography images at the distal pulmonary artery are shown in Figure 2. The intima was more than twice in thickness in this patient with pulmonary hypertension (Figure 2A) compared with a patient with normal pulmonary pressure (Figure 2B). There was no evidence of mural thrombus. An intravascular ultrasound image of the corresponding site showed a strong echogenic layer that prohibited accurate measurement of intimal thickness (Figure 3).

**Disclosures**

Dr Jang received research grant and honorarium from LightLab Imaging.

The study was approved by the hospital ethics committee and the written consent form was obtained before the start of the procedure.
Pulmonary Vascular Changes in Pulmonary Hypertension: Optical Coherence Tomography Findings
Jingbo Hou, Hai Qi, Maomao Zhang, Lingbo Meng, Zhigang Han, Bo Yu and Ik-Kyung Jang

Circ Cardiovasc Imaging. 2010;3:344-345
doi: 10.1161/CIRCIMAGING.109.882498
Circulation: Cardiovascular Imaging is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2010 American Heart Association, Inc. All rights reserved.
Print ISSN: 1941-9651. Online ISSN: 1942-0080

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circimaging.ahajournals.org/content/3/3/344

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation: Cardiovascular Imaging 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: Cardiovascular Imaging is online at:
http://circimaging.ahajournals.org//subscriptions/