

Vasoreactivity in PAH May Change Treatment

BY BRUCE JANCIN

SAN DIEGO — Only 1 in 20 individuals with idiopathic pulmonary arterial hypertension can be successfully managed long-term with oral calcium channel blockers, but even a slim chance of using this simple, inexpensive therapy is so attractive that acute vasoreactivity testing to identify suitable candidates is warranted in all patients with the disorder.

The best agent to use for this testing, which is done during right heart catheterization, is inhaled nitric oxide, Dr. Lewis J. Rubin said at the annual meeting of the American College of Chest Physicians.

"It's very potent, it's short acting, it's a very good identifier of patients who have vasoreactivity—and when you see it, there's no question about it. Within a few breaths of nitric oxide in a responder, you will see the pulmonary artery pressure come down. It's not subtle at



'I think [testing for vasoreactivity] is worth doing for all patients with PAH.'

DR. RUBIN

all," said Dr. Rubin, professor of pulmonary and critical care medicine at the University of California, San Diego.

Roughly 10% of patients with idiopathic pulmonary arterial hypertension (IPAH) will demonstrate a dominant vasoreactive response on testing and therefore are suitable for a therapeutic trial using an oral calcium channel blocker. Earlier studies had put that figure as high as 20%-25%. Moreover, only about half of acute responders will maintain that response long-term on calcium channel blocker therapy, as defined by New York Heart Association class I or II status and sustained hemodynamic improvement without additional PAH-specific agents.

Reasonable alternatives to inhaled nitric oxide for acute vasoreactivity testing are intravenous epoprostenol (Flolan) and intravenous adenosine. Calcium channel blockers should never be used for the testing, a point emphasized in the latest American College of Cardiology/American Heart Association expert consensus document on pulmonary hypertension, coauthored by Dr. Rubin (J. Am. Coll. Cardiol. 2009;53:1573-619).

"They're nontitratable and nonselective, and it's exceedingly dangerous. So you either test for vasoreactivity with something that's available and safe, or you don't do it and you let somebody who does this for a living do it for you," Dr. Rubin said.

Only a tiny percentage of patients with PAH associated with connective tissue disease, portal hypertension, HIV infection, or other nonidiopathic forms of PAH have pulmonary vasoconstriction as

the dominant cause of their pulmonary hypertension are thus candidates for calcium channel blocker therapy.

"Some people say there's no use in testing for acute vasoreactivity in anything other than IPAH. But if you're set up to do it and you can do it relatively efficiently, safely, and quickly, I think it's worth doing for all patients with PAH," the physician continued.

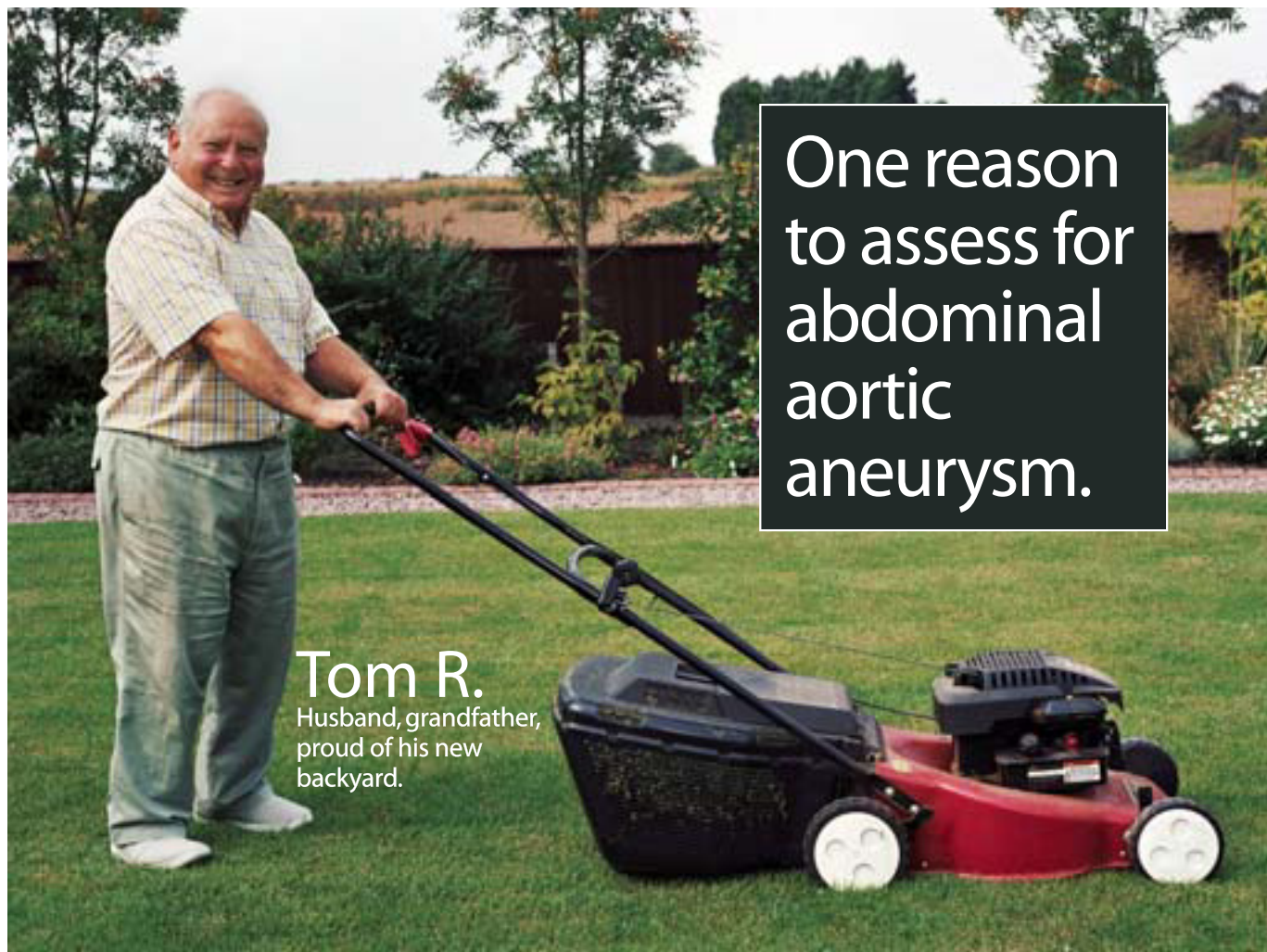
Dr. Rubin made a plea for physicians

in the community to have no hesitation in referring their patients with PAH to experts at centers of excellence.

"This is a highly complex and rapidly evolving condition in terms of management. As treatments have diffused into the community, I think there are concerns about delays in referring patients for more complex management. This is a shared responsibility. We can't see these patients as frequently as you can be-

cause they often come from a distance. We serve as a resource for you. We need to see these patients at intervals," Dr. Rubin said. ■

Disclosures: Dr. Rubin disclosed that he is a consultant and/or on the speakers bureaus for Gilead Sciences, Actelion Pharmaceuticals, Pfizer, United Therapeutics, Aires Pharmaceuticals, Solvay Pharmaceuticals, and other pharmaceutical companies.



One reason to assess for abdominal aortic aneurysm.

Tom R.
Husband, grandfather,
proud of his new
backyard.

4 more reasons to assess for AAA:

1. Rupture of an abdominal aortic aneurysm (AAA) causes up to 30,000 deaths per year in the US, an 80% mortality rate.¹
2. Patients do not usually know they have AAA—many have normal vital signs and appear well.¹
3. AAA occurs in about 10% of men over 65 who have risk factors for vascular disease (e.g., heredity, obesity, smoking).¹
4. Rapid diagnosis and early surgical management have been shown to decrease mortality.¹

You can add a critical measure of patient care to your practice with the AortaScan® AMI 9700. Designed for Internal Medicine, this portable 3D ultrasound instrument lets you measure abdominal aortic diameter quickly, accurately and noninvasively—**no sonographer required.**

Which of your patients are at risk for AAA? Help identify them with the AortaScan AMI 9700.

Visit us at Internal Medicine 2010,
Booth #609, April 22-24,
Toronto, Canada.

800.331.2313 | verathon.com

The AMI 9700 has a brief onboard video tutorial to train staff.



Reference: 1. Reardon RF, Cook T, Plummer D. Abdominal Aortic Aneurysm. In: Ma OJ, Mateer JR, Blaivas M, eds. Emergency Ultrasound. 2nd ed. New York, NY: McGraw-Hill; 2008: 149-168. AortaScan and Verathon are trademarks of Verathon Inc. © 2010 Verathon Inc. 1001IMN-Ad 0900-2990-00-86

VERATHON
MEDICAL

AortaScan®
Aortic Measurement Instrument
A Critical Measure of Patient Health