REFERENCES

1. Florea VG, Cohn JN. The autonomic nervous system and heart failure. Circ Res 2014;114:1815–26.

2. Lymperopoulos A, Rengo G, Funakoshi H, et al. Adrenal GRK2 upregulation mediates sympathetic overdrive in heart failure. Nat Med 2007;13:315–23.

3. Kamal FA, Mickelsen DM, Wegman KM, et al. Simultaneous adrenal and cardiac g-protein-coupled receptor-Gβγ inhibition halts heart failure progression. J Am Coll Cardiol 2014;63:2549–57.

Characteristic Left Ventricular Regional Wall Motion Abnormality Can Help Prevent Unnecessary Ischemic Workup

I have read the paper by Dr. Doshi and colleagues (1) with great interest, and I completely agree that a better job can be done in identifying ischemic etiology in new-onset heart failure. While deciding who should undergo an ischemic workup, the observation of a characteristic regional wall motion pattern in dilated cardiomyopathy may be helpful (2). In >40 patients with dilatative cardiomyopathy, I observed inferior (2Ch [2chamber]) and inferolateral (3Ch) akinesia with preserved contractility in the proximal third of the inferolateral wall and in the proximal third of the anterolateral wall (4Ch), together with various degrees of hypocontractility in the remainder of the left ventricle. None of these patients had obstructive coronary artery disease on coronary angiography. I believe that the presence of this simple 2-dimensional echocardiography parameter can help prevent unnecessary ischemic workup in patients with new-onset heart failure who do not have baseline coronary artery disease.

*Niksa Drinkovic, Jr., MD
*Department of Cardiology
University Hospital Centar Zagreb
Kišpatičeva 12
Zagreb Hr 10000, Croatia
E-mail: ndrink@gmail.com

http://dx.doi.org/10.1016/j.jacc.2016.10.092

Please note: Dr. Drinkovic has reported that he has no relationships relevant to the contents of this paper to disclose. Deepak Bhatt, MD, MPH, served as Guest Editor-in-Chief for this paper. James B. Young, MD, served as Guest Editor for this paper.

REFERENCES

1. Doshi D, Ben-Yehuda O, Bonafede M, et al. Underutilization of coronary artery disease testing among patients hospitalized with new-onset heart failure. J Am Coll Cardiol 2016;68:450–8.

2. Drinkovic N. Characteristic LV regional wall motion abnormality: sign of cardiotoxicity? J Am Coll Cardiol 2015;65:758–9.

REPLY: Characteristic Left Ventricular Regional Wall Motion Abnormality Can Help Prevent Unnecessary Ischemic Workup

We thank Dr. Drinkovic for his comments on our study. Attempts to further explore noninvasive methodologies to sufficiently differentiate between nonischemic and ischemic etiologies of dilated cardiomyopathy are of clear interest (1–4) because they have the potential to obviate the need for ischemic testing for selected patients. However, identification of ischemic etiologies for congestive heart failure with reduced ejection fraction can lead to treatment modifications (both related to secondary preventive medical therapies and revascularization). Furthermore, because revascularization of ischemic cardiomyopathy has been associated with a survival advantage over medical therapy alone (5), any such methodology would be required to have sufficient negative predictive value so patients are not left with a potentially reversible cause for heart failure unaddressed or undiagnosed.

Darshan Doshi, MD, MS
Ori Ben-Yehuda, MD
Machaon Bonafede, PhD, MPH
Noam Josephy, MD, MSc, MBA
Dimitri Karmpaliotis, MD, PhD
Manish A. Parikh, MD
Jeffrey W. Moses, MD
Gregg W. Stone, MD
Martin B. Leon, MD
Allan Schwartz, MD
*Ajay J. Kirtane, MD, SM

*Herbert and Sandi Feinberg Interventional Cardiology and Heart Valve Center
Columbia University Medical Center/New York Presbyterian Hospital
161 Fort Washington Avenue, HIP-6
New York, New York 10032
E-mail: akirtane@columbia.edu

http://dx.doi.org/10.1016/j.jacc.2016.12.032

Please note: Dr. Doshi has received an educational grant from Abiomed. Dr. Ben-Yehuda has received institutional research grants from Abiomed and Thoratec. Dr. Bonafede is an employee of Truven Health, which was awarded a contract to conduct this study in collaboration with Abiomed. Dr. Josephy is an employee of Abiomed. Dr. Karmpaliotis is on the speakers bureaus of Abbott Vascular, Boston Scientific, Medtronic, and Asahi. Dr. Parikh is on the speakers bureaus of

Abbott Vascular, Medtronic, CSI, St. Jude Medical, and Boston Scientific; and is on the advisory boards of Abbott Vascular, Medtronic, and Philips. Dr. Moses is a consultant for Boston Scientific and Abiomed. Dr. Kirtane has received institutional research grants to Columbia University from Boston Scientific, Medtronic, Abbott Vascular, Abiomed, St. Jude Medical, Vascular Dynamics, and Eli Lilly. All other authors have reported that they have no relationships relevant to the contents of this paper to disclose. Deepak Bhatt, MD, MPH, served as Guest Editor-in-Chief for this paper. James B. Young, MD, served as Guest Editor for this paper.

REFERENCES

1. Mody FV, Brunken RC, Stevenson LW, et al. Differentiating cardiomyopathy of coronary artery disease from nonischemic dilated cardiomyopathy utilizing positron emission tomography. J Am Coll Cardiol 1991;17:373–83.

2. Glamann DB, Lange RA, Corbett JR, Hillis LD. Utility of various radionuclide techniques for distinguishing ischemic from nonischemic dilated cardiomyopathy. Arch Intern Med 1992;152:769–72.

3. Sawada SG, Ryan T, Segar D, et al. Distinguishing ischemic cardiomyopathy from nonischemic dilated cardiomyopathy with coronary echocardiography. J Am Coll Cardiol 1992;19:1223–8.

4. Budoff MJ, Shavelle DM, Lamont DH, et al. Usefulness of electron beam computed tomography scanning for distinguishing ischemic from nonischemic cardiomyopathy. J Am Coll Cardiol 1998;32:1173–8.

5. Velazquez EJ, Lee KL, Jones RH, et al. Coronary-artery bypass surgery in patients with ischemic cardiomyopathy. N Engl J Med 2016;374:1511–20.

Role of Adiponectin

Important or Null?

Mechanick and colleagues (1) described recent information about adipokine effects on the cardiovascular system. We already discussed that adiponectin plays an important role in metabolic and cardiovascular homeostasis, and circulating adiponectin levels might act as a biologic marker by having insulin-sensitizing, anti-inflammatory, and antioxidant effects (2,3). With regard to the potential association of adiponectin with clinical outcomes, longitudinal studies have indicated that hypoadiponectinemia is an important risk factor for atherosclerosis, and that hypoadiponectinemia is independent of traditional cardiovascular risk factors, including hypertension and diabetes.

In contrast, Borges et al. (4) investigated the causal effect of adiponectin on coronary heart disease (CHD) risk by performing a Mendelian randomization study using data from genome-wide association studies consortia. Findings from the liberal approach (including variants in any locus across the genome) indicated a protective effect of adiponectin that was attenuated to the null after adjustment for known CHD predictors. Therefore, this study does not seem to support a causal role of adiponectin levels in CHD etiology. It is used by the most updated technique. Furthermore, several recent papers have suggested that high adiponectin levels are linked to unfavorable patient outcomes, particularly in older adult populations (5). What is the clinical meaning of these studies? Unfortunately, this aspect has not yet been investigated much; therefore, further studies in this field should be investigated.

Recently, a high-throughput screening assay was developed to determine adiponectin secretion modulators in 3T3-L1 adipocytes. These compounds could be useful drug candidates for cardiometabolic disorders. Such tools might be applicable to screening for other adipokine modulators that could be useful for the treatment of other conditions.

*Kwang Kon Koh, MD, PhD

*Cardiometabolic Syndrome Unit
Division of Cardiology
Gachon University Gil Hospital
774 Beongil 21, Namdongdaero
Namdong-Gu
Incheon, 21565
Republic of Korea
E-mail: kwangk@gilhospital.com

http://dx.doi.org/10.1016/j.jacc.2016.10.093

Please note: Dr. Koh has reported that he has no relationships relevant to the contents of this paper to disclose. Carl "Chip" Lavie, MD, served as Guest Editor for this paper.

REFERENCES

1. Mechanick JI, Zhao S, Garvey WT. The adipokine-cardiovascular-lifestyle network: translation to clinical practice. J Am Coll Cardiol 2016;68:1785–803.

2. Han SH, Quon MJ, Kim J, Koh KK. Adiponectin and cardiovascular disease: response to therapeutic interventions. J Am Coll Cardiol 2007;49:531–8.

3. Lim S, Quon MJ, Koh KK. Modulation of adiponectin as a potential therapeutic strategy. Atherosclerosis 2014;233:721–8.

4. Borges MC, Lawlor DA, de Oliveira C, White J, Horta B, Barros AJ. The role of adiponectin in coronary heart disease risk: a Mendelian randomization study. Circ Res 2016;119:491–9.

5. Kizer JR, Benkeser D, Arnold AM, et al. Associations of total and high-molecular-weight adiponectin with all-cause and cardiovascular mortality in older persons: the Cardiovascular Health Study. Circulation 2012;126:2951–61.

REPLY: Role of Adiponectin

Important or Null?

We thank Dr. Koh for these comments that point to examples of discrepant data pertaining to adiponectin's role in cardiometabolic disease. We also have a primary research interest in adiponectin and have shown that it can contribute to both vascular and metabolic disease components (1). Regarding vascular disease, it has a direct action on macrophages to inhibit lipid accumulation and foam cell formation when exposed to oxidized low-density lipoprotein (2,3). In adipose tissue, it acts as an autocrine and/or paracrine factor to increase insulin sensitivity, augment lipid storage capacity, and decrease the