

**Letter**

- Diastolic heart failure

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Katina Tzanatos and colleagues comprehensively reviewed the literature on the phenomenon that has become known as diastolic heart failure.<sup>1</sup> It is becoming recognized that the binary categorization of heart failure as either systolic or diastolic heart failure on the basis of an arbitrary cut-off for left ventricular ejection fraction is oversimplified and misguided.<sup>2</sup>

Recent studies have shown that significant numbers of patients diagnosed with diastolic heart failure have demonstrable systolic dysfunction when detailed echocardiographic investigations are conducted.<sup>3,4</sup> Moreover, in a large population-based study, Bursi and colleagues reported that advanced objective echocardiographic parameters of diastolic dysfunction were present in 83% of patients with heart failure who had a low left ventricular ejection fraction (i.e., patients with systolic heart failure) and that this dysfunction was more severe than in patients with diastolic heart failure.<sup>5</sup> Similarly, Brucks and colleagues demonstrated in patients with systolic heart failure that objective parameters of diastolic dysfunction were not only highly prevalent but also more predictive of mortality than left ventricular ejection fraction itself.<sup>6</sup>

Systole and diastole need to be recognized as active and complementary components of the cardiac cycle, both contributing to overall myocardial performance. They are not separate entities, and one of them can only be as effective as the other allows. Thus, in reality, systolic and diastolic dysfunction coexist to varying degrees.<sup>2</sup> The continuing disagreement in major international guidelines over diagnostic criteria<sup>7,8</sup> casts doubt on the accuracy of the patient selection process for studies to

date and, therefore, the validity of these studies' results. A universally accepted definition and criteria for diagnosis would allow cases of heart failure in which left ventricular diastolic dysfunction predominates to be correctly identified and subsequently characterized.

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**Competing interests:** None declared.

**REFERENCES**

- Tzanatos K, Leong D, Wu RC. Office management of patients with diastolic heart failure. *CMAJ* 2009;180:520-7.
- Task Force for Diagnosis and Treatment of Acute and Chronic Heart Failure 2008 of European Society of Cardiology, Dickstein K, Cohen-Solal A, Filippatos G, et al. ESC guidelines for the diagnosis and treatment of acute and chronic heart failure 2008: the Task Force for the Diagnosis and Treatment of Acute and Chronic Heart Failure 2008 of the European Society of Cardiology. *Eur Heart J* 2008;29:2388-442.
- Petrie MC, Caruana L, Berry C, et al. "Diastolic heart failure" or heart failure caused by subtle left ventricular systolic dysfunction? *Heart* 2002;87:29-31.
- Yip G, Wang M, Zhang Y, et al. Left ventricular long axis function in diastolic heart failure is reduced in both diastole and systole: Time for a redefinition? *Heart* 2002;87:121-5.
- Bursi F, Weston SA, Redfield MM, et al. Systolic and diastolic heart failure in the community. *JAMA* 2006;296:2209-16.
- Brucks S, Little WC, Chao T, et al. Contribution of left ventricular diastolic dysfunction to heart failure regardless of ejection fraction. *Am J Cardiol* 2005;95:603-6.
- Hunt SA, Abraham WT, Chin MH, et al. ACC/AHA 2005 guideline update for the diagnosis and management of chronic heart failure in the adult: a report of the American College of Cardiology/American Heart Association Task Force on Practice. *Circulation* 2005;112:e154-235.
- Paulus WJ, Tschöpe C, Sanderson JE, et al. How to diagnose diastolic heart failure: a consensus statement on the diagnosis of heart failure with normal left ventricular ejection fraction by the heart failure and echocardiography associations of the European Society of Cardiology. *Eur Heart J* 2007;28:2539-50.

DOI:10.1503/cmaj.1090016

**Corrections**

In a recent Cases article,<sup>1</sup> the following contact information for the corresponding author should have appeared at the end of the article: Dr. Jorge Burneo, Assistant Professor of Neurology, Epidemiology and Biostatistics, Epilepsy Programme, University of Western Ontario, London Health Sciences Centre, Rm.

B10-118, 339 Windermere Rd., London ON N6A 5A5; fax 519 663-3498; jorge.burneo@lhsc.on.ca

**REFERENCE**

- Burneo JG, Plener I, Garcia HH, et al. Neurocysticercosis in a patient in Canada. *CMAJ* 2009;180:639-42.

DOI:10.1503/cmaj.090645

The caption of Figure 2 in a recent Clinical Image<sup>1</sup> should have identified the histology image as a bone-marrow smear stained with Wright-Giemsa stain. The magnification of this image should have been listed as "original magnification  $\times 1000$ ."

**REFERENCE**

- Gundabolu K, Kong G, Verma A. Gum hypertrophy. *CMAJ* 2009;180:471.

DOI:10.1503/cmaj.090646

In a recent Review,<sup>1</sup> the fetal dose of radiation from a ventilation-perfusion scan in Table 1 should have been listed as 0.06–0.1 rad.

**REFERENCE**

- Ratnapanil S, Bentur Y, Koren G. "Doctor, will that x-ray harm my unborn child?" *CMAJ* 2008;179:1293-6.

DOI:10.1503/cmaj.090649

**Clarification**

A recent Dispatch from the medical front<sup>1</sup> in the News section also appears on 2 Médecins Sans Frontières websites.<sup>2,3</sup>

**REFERENCES**

- Dumont F. On the ground in the Gaza Strip. *CMAJ* 2009;180:610.
- Every single inhabitant of Gaza has suffered in this war. Médecins Sans Frontières; 2009 Feb 12. Available: [www.msf.org.uk/every\\_inhabitant\\_of\\_gaza\\_has\\_suffered\\_20090213.news](http://www.msf.org.uk/every_inhabitant_of_gaza_has_suffered_20090213.news)
- Gaza: "Every single inhabitant of Gaza, without exception, has suffered in this war" [news update]. Médecins Sans Frontières; 2009 Feb 12. [www.msf.ca/news-media/news-updates/2009/02/gaza-every-single-inhabitant-of-gaza-without-exception-has-suffered-in-this-war/](http://www.msf.ca/news-media/news-updates/2009/02/gaza-every-single-inhabitant-of-gaza-without-exception-has-suffered-in-this-war/)

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