## ICD shocks and anxiety: Chicken or egg?

In "Managing anxiety in patients with implanted cardiac defibrillators" (Current Psychiatry, September 2007, p. 17-28), Drs. Douglas P. Gibson and Kristin K. Kuntz address the potential psychiatric sequelae of shocks from implanted cardiac defibrillators (ICDs). Depression is a known risk factor for developing and dying from cardiac disease,1 and recent evidence suggests that anxiety disorders also are associated with increased cardiac risk.<sup>2</sup> Autonomic dysfunction is 1 potential mechanism that could explain the increased cardiac mortality associated with depression and anxiety. Patients with depression have a higher risk of ICD shocks induced by ventricular arrhythmias than nondepressed patients.3 This suggests a vicious circle when anxiety and depression could increase arrhythmic risk through autonomic dysfunction, and arrhythmias leading to ICD shocks may cause or worsen depression and anxiety.

Drs. Gibson and Kuntz also describe how cognitive-behavioral therapy (CBT) can reduce anxiety and depressive symptoms associated with ICD shocks. A paper published last year described how CBT may help decrease ICD shocks.<sup>4</sup> Therefore it is possible that psychotherapeutic interventions such as CBT may do more than help improve depression and anxiety symptoms, whether preceded or caused by ICD shocks. CBT also might help reduce ventricular arrhythmias. This is important because we do not have good empiric evidence that current treatments for



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depression—pharmacologic or psychotherapeutic—reduce cardiac risk.<sup>1</sup>

A recent paper suggests that autonomic dysfunction may improve with sertraline treatment.<sup>5</sup> However, the rationale for treating cardiac patients for depression and anxiety should be improvement of psychiatric symptoms and not an as-yet-unfounded belief that such treatments may also reduce the cardiac mortality and morbidity.

Jonas Hannestad, MD, PhD
Department of psychiatry
Yale University
New Haven, CT

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confirmed by the patient and family members, making this treatment a clear-cut success story.