ISSN: 2996-3885

Cardiology & Cardiovascular Research

Research Article

When the Heart Races: OCD, Hypertension, and the Psychological Toll of Cardiovascular Illness

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Abstract

Cardiovascular disease (CVD) remains the leading cause of death globally, with hypertension contributing to nearly 700,000 deaths annually in the United States alone. Beyond the physical toll, living with heart disease or chronic hypertension can trigger or exacerbate mental health conditions—particularly worldwide panic disorder, health anxiety, and trauma-related symptoms. This article examines the bidirectional relationship between emotional stress and cardiovascular health, highlighting how the psychological burden of living with a potentially life-threatening illness can manifest through compulsive checking behaviors (e.g., pulse or blood-pressure monitoring), catastrophic thinking, and stress-induced OCD symptoms.

Chronic stress contributes to cardiac disease progression through dysregulated cortisol release and systemic inflammation. Approximately six million adults in the U.S. experience panic disorder at any given time. Because panic disorder and cardiac events share overlapping symptoms, diagnostic confusion is common. Studies show that only about 5.1% of patients presenting to emergency departments with chest pain have acute coronary syndromes [7]. However, 20–30% of those presenting with non-cardiac chest pain are ultimately diagnosed with panic disorder after extensive cardiac evaluations [1,4]. This population undergoes costly and unnecessary testing—estimated at $8–13 billion annually [5].

Evidence from controlled studies demonstrates that interoceptive exposure therapy—an evidence-based cognitive-behavioral intervention that systematically confronts feared bodily sensations—reduces anxiety sensitivity and helps patients differentiate between panic and true cardiac events [2,3,6]. By decreasing catastrophic misinterpretation of internal cues, interoceptive exposure alleviates panic symptoms and reduces repeat emergency visits.

Keywords

Cardiovascular disease, Psychology, Blood Pressure, OCD, Hypertension.

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Received: October 22, 2025; **Accepted:** December 07, 2025; **Published:** December 16, 2025

Citation: Eda Gorbis, Bradley Bohall, Alexander Gorbis. When the Heart Races: OCD, Hypertension, and the Psychological Toll of Cardiovascular Illness. Cardiol Cardiovasc Res. 2025;3(4):1-3.

Introduction

Cardiovascular disease is not solely a medical condition but a deeply psychological experience. The sensations of a racing heart, chest tightness, or breathlessness can mirror panic symptoms, often leading patients to fear imminent cardiac arrest. This overlap between physiological and psychological distress creates a complex diagnostic challenge for clinicians.

For patients living with hypertension or cardiac conditions, persistent fear of recurrence can give rise to compulsive monitoring

and reassurance-seeking—behaviors that mirror those seen in OCD. Over time, these maladaptive coping mechanisms can worsen stress physiology, creating a self-perpetuating cycle of anxiety and cardiovascular strain. This paper explores the intersection of panic disorder, OCD, and cardiovascular illness, emphasizing the diagnostic overlap and evidence-based interventions that can break this cycle.

Diagnostic Context

Panic disorder affects approximately six million adults in the United States. According to diagnostic studies, only about 5.1% of patients presenting with chest pain at emergency departments suffer from acute coronary syndromes [7]. However, 20–30% of patients whose chest pain is non-cardiac are later diagnosed with panic disorder after comprehensive medical workups [1,4].

These findings underscore the importance of accurate assessment. Misdiagnosis not only burdens the healthcare system with avoidable testing but also exacerbates patient distress. The economic cost of such misattribution has been estimated between $8 and $13 billion annually [5]. Beyond the financial impact, repeated cardiac evaluations reinforce patients' catastrophic interpretations, intensifying health anxiety and panic symptoms.

Psychophysiological Overlap

The physiological overlap between panic attacks and cardiac events is substantial. Both can present with palpitations, chest pain, dyspnea, dizziness, and diaphoresis. However, panic attacks originate in misinterpretations of sympathetic arousal rather than coronary ischemia. The mind perceives these bodily cues as signals of impending catastrophe, activating further anxiety and amplifying physical sensations.

Patients with prior cardiac events may develop heightened interoceptive sensitivity, interpreting benign fluctuations in heart rate as signs of recurrence. This hypervigilance mirrors compulsive checking behaviors in OCD. The overlap illustrates the necessity of addressing both somatic awareness and cognitive appraisal in treatment planning.

Treatment Approaches

Interoceptive exposure, a cornerstone of cognitive-behavioral therapy (CBT), systematically induces feared physiological sensations—such as increased heart rate or breathlessness—allowing patients to experience them without avoidance. Randomized controlled studies demonstrate its efficacy: Craske et al. found that interoceptive exposure produced significant reductions in panic frequency and severity compared to breathing retraining [2]. Ito et al. reported sustained improvement at one-year follow-up in 77% of patients [3]. Deacon et al. later showed that higher-intensity interoceptive exposure was particularly effective in reducing anxiety sensitivity [6].

Huffman et al. emphasized the importance of coordinated treatment across psychiatry and cardiology [4]. Collaborative management ensures that medical reassurance does not evolve into compulsive testing, while psychoeducation helps patients distinguish panic sensations from true cardiac distress. When interoceptive exposure and CBT are combined with appropriate pharmacological support, they directly disrupt the misinterpretation cycle that perpetuates panic.

Discussion

The frequent misdiagnosis of panic disorder as cardiac illness reflects a critical mind-body intersection. Patients experience real, distressing physiological symptoms that mirror cardiac emergencies, yet the underlying cause often lies in catastrophic misinterpretation. This dynamic fuels unnecessary emergency visits and reinforces the fear of death.

Effective intervention requires interdisciplinary collaboration. Cardiologists, psychiatrists, and psychotherapists must recognize that physiological and psychological processes are intertwined. Interoceptive exposure offers a method to recondition fear responses by demonstrating that bodily arousal need not equate to danger. When combined with patient education and careful medical screening, this approach reduces both panic recurrence and healthcare overuse.

Conclusion

Panic disorder, OCD features, and cardiovascular illness exist on a shared continuum of anxiety and bodily awareness. Misinterpreting benign physiological cues as signs of heart failure not only sustains panic but also contributes to real cardiovascular strain through chronic stress and hyperarousal. Recognizing this interplay allows clinicians to treat both heart and mind simultaneously.

Through interoceptive exposure, CBT, and integrated medical care, patients can learn to reinterpret the racing heart as a transient anxiety response rather than a life-threatening event. This dual focus—psychological and physiological—forms the cornerstone of effective treatment and recovery.

References

1. Fleet RP, Dupuis G, Marchand A, Burelle D, Arsenault A, et al. Panic disorder in emergency department chest pain patients: prevalence, comorbidity, suicidal ideation, and physician recognition. Am J Med. 1996; 101: 371-380.
2. Craske MG, Rowe M, Lewin M, Noriega-Dimitri R. Interoceptive exposure versus breathing retraining within cognitive-behavioural therapy for panic disorder with agoraphobia. Br J Clin Psychol. 1997; 36: 85-99.
3. Ito LM, De Araujo LA, Tess VLC, De Barros-Neto TP, Asbahr FR, et al. Self-exposure therapy for panic disorder with agoraphobia: randomised controlled study of external v. interoceptive self-exposure. Br J Psychiatry. 2001; 178: 331-336.
4. Huffman JC, Pollack MH, Stern TA. Panic disorder and chest pain: mechanisms, morbidity, and management. Prim Care Companion J Clin Psychiatry. 2002; 4: 54.

5. Coley KC, Saul MI, Seybert AL. Economic burden of not recognizing panic disorder in the emergency department. J Emerg Med. 2009; 36: 3-7.

6. Deacon BJ, Farrell NR, Kemp JJ, Dixon LJ, Sy JT, et al. Assessing therapist reservations about exposure therapy for anxiety disorders: The Therapist Beliefs about Exposure Scale. J Anxiety Disord. 2013; 27: 772-780.

7. Gulati M, Levy PD, Mukherjee D, Amsterdam E, Bhatt DL, et al. 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR guideline for the evaluation and diagnosis of chest pain: a report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Circulation. 2021; 78: e187-e285.