Psychiatric Aspects of Heart Disease (and Cardiac Aspects of Psychiatric Disease) in Critical Care

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KEYWORDS

• Depression • Anxiety • Delirium • Psychosis • Posttraumatic stress disorder
• Coronary artery disease • Heart failure • Critical care

KEY POINTS

- Strong emotional reactions are to be expected in patients admitted to cardiac critical care; only some of these are pathological.
- Important psychiatric issues associated with heart disease include anger and hostility, anxiety, depression, delirium and neurocognitive disorders, psychotic disorders, and posttraumatic stress disorder.
- All of these psychiatric issues affect and are affected by aspects of cardiac critical care. Heart surgery, transplantation, mechanical circulatory support, and defibrillators are associated with psychiatric morbidity.
- Depression is extremely common in patients with coronary disease and heart failure; treatment is helpful, but persistent depression is associated with increased morbidity and mortality.
- Some psychiatric drugs have significant cardiovascular effects.

PSYCHOLOGICAL RESPONSES TO CRITICAL CARE

This paper addresses the psychiatric aspects of heart disease and the cardiac aspects of psychiatric disease as they pertain in critical care. Because heart disease remains the leading cause of death in the United States, and affects about one-third of

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all adults over the age of 35, and many psychiatric disorders are associated with increased heart disease risk, it is inevitable that there is substantial comorbidity in cardiac critical care with psychiatric disorders.[1–4]

It is important to appreciate that people with no psychiatric problems may develop strong emotional adjustment reactions to critical heart disease that are not necessarily pathologic (**Box 1**). Hospitalization for acute coronary events, decompensated heart failure, or arrhythmias may be experienced as a crisis, with the illness perceived as a sudden and unexpected threat to survival, identity, and social role function. In these circumstances, some degree of fear, regression, hypervigilance, and sadness is to be expected. Patients may revisit past behavior that has contributed to illness, such as smoking or failure to adhere to the medication regimen, with feelings of guilt and regret. Denial of illness or of the significance of illness may occur as a defense against the conscious awareness of anxiety. If denial does not interfere with care, it is generally best left alone.

In addition to the illness, aspects of the cardiac critical care environment may provoke psychological problems. Constant cardiac monitoring, with recurring visual and auditory alarms, tethering to lines and wires, noise in the intensive care unit (ICU), and uncontrolled intrusions into sleep time and visiting time by medical, nursing, and ancillary staff are distressing and may contribute to sleep–wake cycle disruption and disorientation. Painful procedures, such as cardioversion and the placement of arterial and central venous lines, may be experienced as traumatic. Everyday experiences to which critical staff are inured are novel and of unknown significance to the patient; the value of explanation and guidance about what is happening cannot be overstated.

Crying and expressions of fear are not abnormal in these circumstances, but should not be ignored. Patients should be offered the opportunity to express feelings and have their experiences validated and normalized, rather than treated as pathologic. These reactions should only rarely provoke psychiatric consultation. Typically, the experience of acute critical illness is associated with increased dependence on others; the patient's comfort with dependence on care providers will be affected by his or her experience of early life relationships and subsequent attachment style.[5] Character style-based difficulty forming a trusting relationship may manifest in critical care settings with excessive dependence, independence, or emotional volatility; psychiatric consultation may help the patient and staff to set parameters for a workable relationship.

Box 1
Challenges to psychological adjustment to cardiac critical care

Patient factors

- Threat of death
- Threat to identity and role function
- Self-blame

Environment/care factors

- Noise
- Painful procedures
- Tethering to wires and lines; immobility
- Sleep disruption
- Loss of autonomy
- Treatment-specific effects