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Clinical Pearl

Depression and Heart Disease

Although recent studies have shown a correlation between clinical depression and heart disease in males, proper management with antidepressants can help prevent cardiovascular diseases.

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A recent study that followed nearly 1200 Johns Hopkins Medical School male students over 40 years found that those with a history of clinical depression—even a depressive episode more than 10 years prior—were twice as likely to develop coronary artery disease, and the history or incidence of depression raised their risk for heart attack by 20 percent [1].

Over the past several years, a growing body of research has uncovered a significant association between depression and increased risk for such cardiovascular diseases such as congestive heart failure and stroke. To state it another way, happier, more cheerful people have a lower rate of heart disease. Studies examining the link between depression and heart disease have revealed that [2]:

- Middle-aged men with depression were 3 times more likely to develop strokes during the next 14 years.
- In a longitudinal study of 5000 people aged 65 and over, those who had frequent depressive symptoms were 40 percent more likely to develop coronary artery disease.
- In a 10-year study of 1300 men, each increase in their level of optimism (as measured by answers to a survey) reduced their chance of developing coronary heart disease by 25 percent.

The hypothesized biological causal link between depression and heart disease is based on the deleterious effect that stress hormones have on the cardiovascular system. During normal stress situations, the body releases more adrenaline and cortisol. While these stress hormones have short-term benefits, long-term exposure to higher than normal levels of cortisol, which are found in patients with depression, have adverse physiological effects. For example, hypercortisolemic depressed patients suffer from resistance to insulin and increased visceral fat, which might partially explain why major depression can be considered a risk factor for cardiovascular disorders [3].

The preferred antidepressants for people with, or at risk for, heart disease are selective serotonin reuptake inhibitors such as fluoxetine, paroxetine, and sertaline. These medications have fewer cardiac side effects than older tricyclic antidepressants [4].

References

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