Coronary Artery Disease and Spinal Cord Injury

People with chronic SCI have high rates of heart disease. The best-known studies in this area have looked mostly at men (not women) with SCI, but they have taught us that at least 50% of people with paraplegia and 80% of people with tetraplegia have evidence of heart disease when they undergo stress testing (1,2), even if they never get the classic symptoms of chest pain or problems with breathing. Over 20% of people with SCI will die of heart disease (3), but that number may increase as people with SCI are living longer lives than they did even two or three decades ago.

No one knows for sure why people with SCI have high rates of heart disease. Between 70 and 80% of people with SCI have abnormal cholesterol levels (4), around 20% have diabetes, and 30% of people with paraplegia have high blood pressure (less common among people with tetraplegia) (5,6). Each of these conditions can increase the risk of developing heart disease, as does a lack of physical activity. There are other risk factors for heart disease in SCI which we are only beginning to understand. Low testosterone levels in men with SCI may contribute to unfavorable cholesterol levels, and sleep apnea—a problem with breathing at night, which as many as half of people with SCI may have (7,8)—may also increase overall risk.

There have only been two journal articles looking at treating people with SCI with cholesterol-lowering medications (9,10). Unfortunately, neither one questioned if doing so reduces the risk of having a heart attack or dying; they only examined whether these medications can be safely used by people with SCI, which they can.

There are no specific guidelines for screening people with SCI for heart disease, although national guidelines recommend checking cholesterol levels every five years. Given that people with SCI are at high risk, their physicians should check their EKGs (an office-based test of how your heart functions) and may consider asking them to take a cholesterol reducing medication (called a “statin”), even if their “bad” cholesterol levels appear normal. Other risk factors for heart disease should be discussed, including blood pressure, lack of exercise, and sleeping problems. Doctors evaluating individuals with SCI who have breathing complaints, nausea, chest pain, dysreflexia, or certain other symptoms should consider the possibility of heart disease.

References:


Source: Excerpted from “Health Considerations in Spinal Cord Injury: A Handbook for People with SCI” with permission from Michael D. Stillman, M.D., Assistant Professor of Internal Medicine and Neurosurgery, University of Louisville School of Medicine.

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