

## Walking Ability Predictor of Adverse Outcomes Following Cardiac Surgery



A recent study just published in *JAMA Cardiology* reveals that people who have slow gait speed prior to open heart surgery have an increased risk of death following the procedure. Gait speed is a common test that that is used to screen individuals for frailty. It assesses how long a person takes to walk about 5 meters or 16.4 feet at a comfortable pace. This test reflects dysfunction in muscles of the lower extremity and to some extent, neurovascular and cardiopulmonary function.

The utility of gait speed is gaining more momentum in open heart surgery because an increasing number of patients are living past the age of 70 and requiring surgery. Thus a test that can predict the risk of death would be very helpful for surgeons.

Researchers at McGill University used the gait speed screening test and conducted their study in 109 centers. The 5-meter gait speed test was performed in 15,171 patients with a median age of 71. These patients underwent some type of open heart procedure such as coronary artery bypass, aortic or mitral valve surgery or a combination.

What the researchers observed was that slow gait speed was an independent predictor of postoperative mortality. Further, they observed the same result across a spectrum of commonly performed cardiac surgical procedures used to treat ischemic and valvular heart disease. Interestingly they also observed that with worsening gait speed, there was also a corresponding increase in operating mortality.

Now these researchers are recommending that cardiac surgeons use gait speed to determine risk of their geriatric patents undergoing open heart surgery. However it should be understood that gait speed alone should not be the deciding factor is refusing or accepting a patient for surgery. Other factors like diabetes, renal function, stroke, peripheral vascular disease, and COPD also play a critical role.

The one benefit of gait speed is that it is an inexpensive test that can be done in the clinic with the results available right away. It is not known if gait speed is one reason why Parkinson patients are also deemed to be at very high risk for open heart surgery.

Source: JAMA Cardiology

Image Credit: YouTube Images

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