

The full report is titled “Quality-of-Life Outcomes With Coronary Artery Bypass Graft Surgery in Ischemic Left Ventricular Dysfunction. A Randomized Trial.” It is in the 16 September 2014 issue of *Annals of Internal Medicine* (volume 161, pages 392-399). The authors are D.B. Mark, J.D. Knight, E.J. Velazquez, J. Wasilewski, J.G. Howlett, P.K. Smith, J.A. Spertus, M. Rajda, R. Yadav, B.L. Hamman, M. Malinowski, A. Naik, G. Rankin, T.M. Harding, L.A. Drew, P. Desvigne-Nickens, and K.J. Anstrom.

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Quality of Life After Bypass Surgery in Patients With Chest Pain and Heart Failure

What is the problem and what is known about it so far?

Studies in patients with chest pain and blocked arteries in the heart have found that pain relief is achieved more often when patients are treated with medical therapy plus surgery than with medical therapy alone. These types of studies have not been done in patients who have coronary artery disease plus heart failure, which can cause additional symptoms, such as shortness of breath during exercise or when lying down and swelling of feet and ankles.

Why did the researchers do this particular study?

To evaluate quality-of-life outcomes after medical therapy and surgery in patients who have coronary artery disease plus heart failure.

Who was studied?

Patients in 22 countries with chest pain, coronary artery disease, and heart failure shown by laboratory tests of heart function.

How was the study done?

All patients received medical therapy as recommended by current guidelines. Some patients received only medical therapy, and other patients were randomly assigned to receive medical therapy plus surgery to open up blockages in the coronary arteries.

What did the researchers find?

Medical therapy with surgery was better than medical therapy alone in relieving symptoms and improving quality of life for the 3 years that these outcomes were measured. Also, patients who had medical therapy with surgery lived longer than patients who had medical therapy alone, but this difference could have occurred by chance.

What were the limitations of the study?

Patients and researchers knew which treatment each patient received, and this knowledge could have affected how symptoms were reported and recorded.

What are the implications of the study?

Medical therapy plus surgery is better than medical therapy alone for relieving symptoms and improving quality of life in patients with coronary artery disease plus heart failure.