

Spironolactone to improve exercise tolerance in people with permanent atrial fibrillation and preserved ejection fraction: the IMPRESS-AF RCT

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Plain English summary

The IMPRESS-AF RCT

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Plain English summary

The heart of a patient with 'heart failure' is unable to supply enough blood to their body. In about half of all heart failure patients, the heart actually contracts reasonably well, but it does not relax properly because it is very stiff and so does not fill sufficiently with blood between heartbeats. This condition is more common in patients who also have atrial fibrillation, an irregular heart rhythm (arrhythmia). Such patients have a poor quality of life and a high risk of death. So there is a clear need to find beneficial therapies for patients with atrial fibrillation.

This clinical trial [entitled Improved exercise tolerance in heart failure with Preserved Ejection fraction by Spironolactone on myocardial fibrosis in Atrial Fibrillation (IMPRESS-AF)] tested whether or not giving a drug, spironolactone, to patients with atrial fibrillation increases exercise capacity, improves the heart's ability to relax and improves quality of life. Two hundred and fifty patients with atrial fibrillation were randomly (which means by chance, like by flipping a coin) assigned to take either spironolactone or placebo (sham medication) for 2 years. The main tests during the trial included a measure of exercise capacity (using both a bike test and a walking test) and a heart scan. Patients also completed questionnaires asking them about their quality of life. The trial investigators did not see a difference in the effect of spironolactone and placebo on exercise capacity, heart function or patient-reported quality of life. However, safety concerns about the effect of spironolactone on kidney function were noted.

The trial's findings suggest that treatment with spironolactone in patients with atrial fibrillation and preserved left ventricular function does not improve exercise tolerance or quality of life.

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