



Extended Research Article

Benefits of aldosterone receptor antagonism in chronic kidney disease: the BARACK-D RCT

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Plain language summary

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What was the problem?

Chronic kidney disease describes a long-term reduction in kidney function due to any cause. Chronic kidney disease is divided into five stages of severity, with stage 5 being the most severe. These stages are determined by a kidney function blood test called the estimated glomerular filtration rate and/or the amount of protein in the urine.

Chronic kidney disease affects around 10% of people in the United Kingdom and is more common with increasing age and in people with other illnesses, such as hypertension, diabetes, obesity and underlying primary kidney disease. People with chronic kidney disease are at an increased risk of developing cardiovascular disease (heart disease and stroke), including heart failure and sudden cardiac death. However, conventional treatments for cardiovascular disease have had disappointing results in people with chronic kidney disease. There are also limited treatment options to prevent further decline in kidney function.

Established drugs called aldosterone receptor antagonists reduce deaths in patients with heart disease and showed promise in small-scale studies. There is also evidence that these drugs may reduce kidney damage attributed to circulating aldosterone.

What did we do?

In this study, we compared the effect of a low-dose aldosterone receptor antagonist, spironolactone, in people with moderate to severe chronic kidney disease compared to any other routine care to find out if this changed how long people survived, and if they were protected from cardiovascular disease or kidney damage.

What did we find?

We found no evidence that the addition of low-dose spironolactone improved cardiovascular or renal outcomes over three years and longer of treatment compared to the standard standard of care.

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This article

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