

The effect of statins on muscle symptoms in primary care: the StatinWISE series of 200 N-of-1 RCTs

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Plain English summary

The StatinWISE series of 200 N-of-1 RCTs

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Plain English summary

Statins are one of the most commonly prescribed drugs in the UK. There is strong evidence that they are effective in safely reducing heart disease; however, there is some doubt about whether or not statins cause muscle pain, stiffness or weakness. This research has been carried out to understand the effect of statins on muscle symptoms.

To answer our question, we asked 200 volunteers from across England and Wales to participate in the study. Patients who joined the study either had recently stopped taking statins because of muscle symptoms or were considering stopping because of muscle symptoms. Patients who participated were randomly assigned to a sequence of six 2-month treatment periods during which they received either statins or a placebo. Neither patients nor their general practitioner knew which tablet they were receiving. This helped to reduce bias in the data. At the end of each treatment period, patients were asked to report any muscle symptoms, or any other symptoms, that they experienced.

The key result of this work is that patients reported no difference, on average, in their muscle symptoms between periods of taking a statin and periods of taking a placebo. We also assessed the impact on the patient's quality of life by looking at how statins affected the following areas: general activity, mood, walking ability, normal work, relations with other people, sleep and enjoyment of life. As with muscle symptoms, there was no evidence of a difference between statin and placebo periods. The majority of patients who finished the trial decided to continue using statins after the trial. Future research should be carried out to assess different statin doses, as higher doses are often used following a heart attack. In addition, further work is needed to see how the approach we used could be adopted into everyday clinical care.

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This report

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