The Cannabinoid Use in Progressive Inflammatory brain Disease (CUPID) trial: a randomised double-blind placebo-controlled parallel-group multicentre trial and economic evaluation of cannabinoids to slow progression in multiple sclerosis

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Plain English summary

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Plain English summary

The Cannabinoid Use in Progressive Inflammatory brain Disease study investigated the effectiveness and safety of the cannabinoid tetrahydrocannabinol (THC) in slowing progressive multiple sclerosis (MS) over 3 years.

Four hundred and ninety-three people with primary or secondary progressive MS were recruited to the study from 27 UK sites between May 2006 and July 2008. A requirement of study entry was that walking was affected by MS but that participants could still walk, with aids if necessary. Participants were randomly assigned to receive oral THC (329 people) or placebo (164 people) capsules in a ‘double-blind’ manner so that neither participants nor research staff were aware of treatment allocations. Dose was titrated on an individual basis according to body weight and side effects, before being gradually reduced to zero after 3 years.

The two primary measures of treatment effectiveness were scores on the Expanded Disability Status Scale (EDSS) and MS Impact Scale-29 version 2 (MSIS-29v2). The EDSS was assessed 6-monthly, with progression confirmed if sustained at two consecutive visits. Secondary measures included MS Functional Composite and various self-completion questionnaires. Participants at 13 sites underwent yearly magnetic resonance imaging brain scans.

The study found no evidence that THC has an effect on MS progression. EDSS and MSIS-29v2 scores showed little change over the study period and no difference was found between the THC and placebo groups. There was some evidence that THC might have a beneficial effect in participants at the lower end of the disability scale, but numbers were small and further studies will be needed. The study raised no major issues regarding safety of THC.
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This report

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The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from the material published in this report.

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