



Synopsis

Methylphenidate versus placebo for fatigue in patients with advanced cancer: the MePFAC randomised controlled trial

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Plain language summary

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Fatigue is a common and distressing symptom experienced by patients with advanced cancer receiving palliative care, for which there are few treatments available. Methylphenidate is a stimulant medicine which some previous studies suggested might help cancer-related fatigue. We undertook a randomised controlled trial to compare the effects of methylphenidate or placebo (an inactive dummy pill) on cancer-related fatigue and the frequency of side effects. We involved 162 patients with advanced cancer and fatigue at 17 different centres (hospital, hospices and community services) into the trial. They were randomly allocated to receive either methylphenidate or placebo tablets. The number of tablets was adjusted each week over the first 6 weeks of the trial (depending on the response and/or presence of side effects). Each week, participants were either contacted by telephone or seen at face-to-face appointments to check on their well-being, response to treatment and side effects. After 6 weeks, the dose remained the same for a further 2 weeks, then was reduced for a further week, then stopped altogether for the final week of the trial. After 6, plus or minus 2, weeks of treatment, we found that people given methylphenidate had a small improvement in fatigue that was not statistically significant and that was too small to be clinically important. Participants given methylphenidate reported some improvements in fatigue at other times (weeks 2–6 and week 8) that may not be explained by chance, but which were nonetheless still not large enough to be considered clinically important. There was no difference in frequency of serious (life-threatening) side effects or death in the two groups. Nor were there any major differences in frequency of other (mild, moderate or severe) side effects. On the basis of this trial, methylphenidate is not recommended for use as a treatment of fatigue in patients with advanced cancer.