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Journal club

Cytisine improves smoking cessation

In this single-centre, randomised, double blind, placebo-controlled trial, the efficacy and safety of cytisine as an aid in smoking cessation was compared with placebo. Three hundred and seventy participants were randomly assigned to either the active drug or placebo in an equal ratio for 25 days. Participants in both groups received a minimal amount of counselling during the study.

The primary outcome measure was sustained biochemically-verified smoking abstinence for 12 months after the end of treatment. Secondary outcomes were sustained abstinence for the first 6 months and point prevalence at 12 months. This study found that the rate of sustained 12-month abstinence was 8.4% (31 participants) in the cytisine group compared with 2.4% (9 participants) in the placebo group. The 7-day point prevalence for abstinence at the 12-month follow-up was 13.2% in the cytisine group and 7.3% in the placebo group. The relative difference in smoking cessation between cytisine and placebo was higher than previous studies have shown for varenicline and nicotine replacement therapy. However, the absolute difference in the rate of abstinence (6 percentage points) was lower than that shown for varenicline and similar to that shown for nicotine replacement therapy. Cytisine resulted in more gastrointestinal adverse events than placebo and rates of discontinuation or dose reduction were similar in both groups.

Cytisine was more effective than placebo for smoking cessation in this single-centre study. The authors believe that combining cytisine with more intensive behavioural support may result in higher absolute quit rates and, by giving a longer regimen, it is possible that efficacy could be improved. However, this study was not large enough for an assessment of uncommon adverse events and it is likely that more studies into the safety and efficacy of cytisine are needed and surveillance for rare side effects undertaken.

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Wa'el Osman

Correspondence to Dr Wa'el Osman, Department of Respiratory Medicine, Dumfries and Galloway Royal Infirmary, Bankend Road, Dumfries DG1 4AP, UK; w.osman@nhs.net

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