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LUNG ALERT

Varenicline is useful for smoking cessation

▲ Smoking cessation with varenicline, a selective $\alpha 4 \beta 2$ nicotinic receptor partial agonist: results from a 7-week, randomized, placebo- and bupropion-controlled trial with 1-year follow-up. Nides M, Oncken C, Gonzales D, *et al*. *Arch Intern Med* 2006;**166**:1561–8.

Current smoking cessation therapies, including nicotine replacement therapy, bupropion and nortriptyline, report up to 30% quit rates at 1 year if used in conjunction with behavioural counselling.

Varenicline is a new drug that is a partial nicotine receptor agonist and antagonist designed specifically to aid smoking cessation by modulating central dopamine release.

The patients were randomised to receive either placebo, varenicline 0.3 mg once daily, varenicline 1 mg once daily, varenicline 1 mg twice daily or bupropion 150 mg twice daily for 7 weeks, along with counselling.

The measured outcomes were: patient declared quitting for 4 consecutive weeks during the treatment phase; and carbon monoxide (CO) monitoring and quit rate up to 1 year. There was a significant 30% dropout rate over the treatment period equally across all groups.

All active treatments resulted in a higher quit rate compared with placebo and there was no significant difference between varenicline and bupropion in the short term. However, CO monitored 4- to 7-week quit rates were lower than the patient declared quit rates (40% v 48%). At 1 year, only the CO monitored quit rate (14.4%) in the varenicline 1 mg twice daily group was significantly better than that with placebo. Both active drugs reduced feelings of withdrawal. Overall adverse effects were similar between active drugs and placebo.

In conclusion, only high doses of varenicline, in combination with counselling, helped 14% of patients to quit long term. It could be inferred that patient-declared quit rates should not be relied on to assess smoking cessation interventions, given the discrepancy between patient declared quit rates and those based on CO monitoring.

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