Naltrexone effective for alcohol dependence

Clinical question
How effective are opioid antagonists (naltrexone and nalmefene) in the treatment of alcohol dependence?

Bottom line
Naltrexone reduced the risk of return to heavy drinking (>5 standard drinks per day in men and >4 standard drinks per day in women) to 83% of the placebo risk, decreased drinking days by about 4% and heavy drinking days by about 3%. The NNT* = 9 for return to heavy drinking or, on average, avoiding 1 additional day with heavy drinking per month. Naltrexone also reduced the amount of alcohol consumed and the level of gamma-glutamyltransferase. On days on which alcohol was consumed patients treated with naltrexone managed to refrain from about 1 drink they would have had under placebo. For injectable formulations of naltrexone, which can be advantageous for patients who have problems with taking their medication on schedule, and for the opioid antagonist nalmefene, the database was too sparse to allow final conclusions.

*Caveat
Even though the sizes of treatment effects might appear moderate, these results should be seen against the background of the relapsing nature of alcoholism and the limited therapeutic options currently available for its treatment. Naltrexone did not prevent return to any drinking. The drug does not have serious side effects, but tiredness and gastrointestinal symptoms like nausea, stomach pain and loss of appetite are common. In most studies, treatment was provided over a period of 3 months, with follow-up ranging from 3–17 months.

Context
Alcohol affects various brain regions, including the opioid receptor system, which mediates the euphoric and pleasurable effects of alcohol. By blocking alcohol effects at these receptors the opioid antagonists naltrexone and nalmefene can reduce alcohol “liking” and “craving” and thus support alcohol-dependent patients in cutting down their drinking.

Cochrane Systematic Review

PEARLS No. 316, June 2010, written by Brian R McAvoy

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners – developed by the Cochrane Primary Care Field, New Zealand Branch of the Australasian Cochrane Centre at the Department of General Practice and Primary Health Care, University of Auckland and funded by the New Zealand Guidelines Group. New Zealanders can access the Cochrane Library free via www.nzgg.org.nz

PEARLS provide guidance on whether a treatment is effective or ineffective. PEARLS are prepared as an educational resource and do not replace clinician judgement in the management of individual cases. View PEARLS online at: www.nzdoctor.co.nz; www.nzgg.org.nz; www.cochraneprimarycare.org