



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-glutamyl-transferase. 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.

* NNT = number needed to treat to benefit 1 individual

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

Rosner S et al. Opioid antagonists for alcohol dependence. Cochrane Reviews, 2010, Issue 12. Article No. CD001867.

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This review contains 50 studies involving 7793 participants.

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