

Drug used for alcohol dependence might also treat stuttering, suggest researchers

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Baclofen, a drug that has recently been used to treat alcohol dependence despite not officially being licensed for this condition, might also help stop stuttering, suggest researchers in the journal *BMJ Case Reports*.

But the findings, which are based on one person, would need to be confirmed in much larger clinical studies in people who are not [alcohol](#) dependent, before any firm conclusions could be drawn, they caution.

Baclofen is a [muscle](#) relaxant which is widely used for the treatment of stiff or heavy muscles caused by conditions such as multiple sclerosis and spinal cord diseases.

It has recently been used to treat alcohol dependence because it is thought to target the nerve centres in the brain involved in reward and addiction. As yet, the evidence for [baclofen](#)'s impact on curbing alcohol craving and improving abstinence has been mixed.

But it seemed to work for a 61 year old man who regularly drank 2-3 litres of wine every day and admitted to having had a problematic relationship with alcohol for 20 years.

The man had gone through several detox and rehab programmes, but afterwards had only managed to keep off the booze for a couple of years before resuming his excess alcohol intake.

As well as sleep problems and a history of depression, he also stuttered,

which he attributed to difficulties finding the right words to express himself in Dutch, as this wasn't his native tongue.

The potential impact of baclofen on stuttering came to light when the man agreed to take part in a clinical trial looking at treating alcohol dependence with the drug.

As part of the trial he ended up taking 120 mg of baclofen every day for 10 weeks. But once a daily dose of 90 mg had been reached, his doctors noticed that he had stopped stuttering.

Nevertheless, the man complained of sleepiness, stiff muscles and heavy legs on this dose, prompting his doctors to gradually taper down the dose to zero.

However, once he had stopped taking baclofen, he returned to his former level of drinking and his stutter re-emerged. He was therefore advised to continue taking the drug at a daily dose of 90 mg after which he stopped drinking for a prolonged period and his stutter disappeared.

"This case illustrates the potential efficacy of a high-dose baclofen treatment for patients with [[alcohol dependency](#)]," write the authors, adding that the drug may offer a new treatment option for stuttering.

But they point out that as the man's stuttering always accompanied excess drinking, alcohol might have directly affected his speech patterns.

Nevertheless, they suggest that there are potentially plausible biological explanations for their finding, one of which is that muscle tension is a factor in stuttering, and therefore the muscle relaxant properties of baclofen could be acting on the respiratory muscles and/or those in the neck and face.

Secondly, some studies suggest that baclofen reduces anxiety in people who are alcohol dependent: anxiety is also associated with stuttering.

Another possibility is that baclofen may indirectly reduce production of the neurotransmitter dopamine: higher levels of this chemical are associated with the speech impediment.

More information: Case report: Speaking fluently with baclofen? *BMJ Case Reports* (2017). [casereports.bmj.com/lookup/doi ... 1136/bcr-2016-218714](https://casereports.bmj.com/lookup/doi/10.1136/bcr-2016-218714)

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