

# New drug brings hope for migraine sufferers

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Millions of migraine sufferers have been given hope after pioneering jabs were shown for the first time to prevent attacks.

Two drugs effectively halved migraine attacks over several weeks in trials that experts said made it “an exciting day” for Britain’s eight million migraine victims, three quarters of whom are women.

Patients can take painkillers and other drugs to ease the symptoms, but the latest studies hold out the possibility that regular injections could reduce or prevent migraines.

Although further testing taking several years will be needed before the drugs are considered for NHS use, scientists said that the results constituted the most convincing evidence yet that focusing on pain-transmitting molecules in the brain could stop attacks.

Migraine sufferers are crippled by debilitating headaches, which can be



Three quarters of Britain's eight million migraine sufferers are women  
JAMIE GRILL/GETTY IMAGES

triggered by stress or tiredness, but the exact cause of the disorder is unclear. Scientists increasingly believe that the condition relates to problems in the brain’s pain circuitry and researchers have sought to single out a linchpin molecule known as the calcitonin gene-related peptide (CGRP), which plays a key

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role in the processing of pain.

In the latest studies, two drugs that aim to block CGRP receptors showed results that “may potentially represent a new era in preventative therapy for migraine”, said Peter Goadsby of the University of California, San Francisco, who was involved in both.

In the first, 81 patients given a single intravenous dose of the drug ALD403 had an average of 5.6 fewer migraine days a month over the next eight weeks, a fall of 66 per cent. This was significantly different from the 52 per cent decrease seen by 82 other patients given a placebo. Sixteen per cent of those given the drug stopped having migraines entirely, while none in the placebo group did, according to results presented at the American Academy of Neurology annual meeting in Philadelphia.

In the second study of 217 people, those given fortnightly injections of a drug called LY2951742 had an

average of 4.2 fewer migraine days a month over 12 weeks, a fall of 63 per cent; those given a placebo had a 42 per cent fall.

“We’re cautiously optimistic that a new era of mechanism-based migraine prevention is beginning,” David Dodick, of the Mayo Clinic in Arizona, lead author of the second study, said.

“Migraine remains poorly treated and there are few effective and well-tolerated treatments approved that prevent attacks from occurring.

“There is a huge treatment need for migraine — the third most common and seventh most disabling medical disorder in the world.”

Mark Weatherall, a consultant neurologist at the Imperial College NHS Healthcare Trust and a trustee of the Migraine

Trust charity, said the findings were “potentially very exciting” because they showed that CGRP could be blocked over the long term.

“The reduction in the number of migraine attacks seen in these studies is both statistically and clinically meaningful, and the fact that some patients were rendered free from attacks is particularly impressive,” he said. “We’ll need to see these results reproduced in larger phase-III studies, and ultimately of course there will be questions of cost if and when approval is sought to use these types of medicines on the NHS.

**‘There are few well-tolerated and effective treatments approved that prevent attacks’**

“Despite these cautions, however, this is an exciting day for those who suffer from and treat migraine, as we are being given another glimpse of the future of the management of this under-diagnosed, under-treated and often debilitating neurological disorder.”

Andrew Dowson, chairman of the medical advisory board for the charity Migraine Action, said: “There are still many hurdles to overcome with regards to testing efficacy, side effects and also how economically viable the treatment will be for patients, and, even if successful, it will be some years before patients can access these options.

“However, research into migraine is badly needed and we welcome these new studies. We will continue to monitor the progress of this particular group of drugs with interest.” ■