

# Alzheimer's patients 'get better'

Oliver Moody Science Correspondent

Patients with early-stage Alzheimer's disease have had a dramatic reversal in their memory loss within months of being put on a controversial recovery plan.

One 69-year-old entrepreneur was able to go back to work and expand his business while another woman recovered her fluency in two-foreign languages.

The scientists behind the trial said the "unprecedented" results marked a new era in which memory problems could be treated and even prevented through a combination of drugs, exercise, diet changes and brain training.

Alzheimer's has been identified as one of the gravest health crises facing Britain. The most common form of dementia, it already affects 850,000 people in the UK and is thought to cost the country more than £26 billion a year.

There is at present no drug capable of reversing the symptoms, which include confusion, loss of speech and the breakdown of memory.

The Times understands that the researchers have already contacted GPs in Britain with a plan to launch their programme in private healthcare.

However, independent scientists said that although the results seemed striking they were severely limited by several flaws, including the fact that the experiment included only ten patients and relied heavily on anecdotal evidence.

Researchers in California claim that a customised programme of 36 different treatments — some as simple as changing sleep patterns — can restore some patients with Alzheimer's or cognitive impairment to normality and

significantly improve the lives of others. Their plan, known as metabolic enhancement for neurodegeneration (Mend), attacks the disease on several fronts, including stress, low-sugar diets, hormone therapy and daily physical activity.

Writing in the journal *Aging*, they said there was no single cause or cure for Alzheimer's and the most effective approach was for patients in the early stages of the condition to make com-

prehensive lifestyle changes as well as taking drugs and vitamin supplements.

One of their memory-loss patients went from leaving his car idling on the driveway with the keys in the ignition to returning to work.

Brain scans showed significant increases in grey matter across all ten people on the programme, who were aged between their late 40s and mid-70s.

The benefits seemed to last as long as

the patients stuck to their recovery plans, lasting up to four years.

Dale Bredeben, assistant professor of neurology at the University of California, Los Angeles, who led the work, said his team now planned to test the Mend method on a much larger group.

Other experts expressed scepticism. Gordon Wilcock, emeritus professor of geratology at the University of Oxford, said the results were "much better than for any other treatment report with

Alzheimer's disease" but he had important reservations.

The experiment needed to be repeated with much more rigour and on a much greater scale, he said.

Professor Wilcock also pointed out that the patients were mostly in their 50s, much younger than most people diagnosed with the condition, and in some cases it was not clear that they definitely had Alzheimer's.

"This is an interesting preliminary report of the apparent benefit of a novel therapeutic strategy for AD [Alzheimer's disease]," he added.

"However, it needs to be repeated in a blinded, controlled proof-of-concept trial with larger numbers of patients subjected to rigorous diagnostic assessment and follow-up, including evaluation of biomarkers [chemical measures of the disease such as amyloid-beta protein]."

Nick Fox, professor of neurology at University College London, said the experiment had been sloppily carried out and "risked raising completely unfair expectations in patients".

Dr Rosa Sancho, head of research at Alzheimer's Research UK, said it was likely that the best way to confront the disease was to use several different strategies at once, but the study was too small and preliminary to draw any far-reaching conclusions at this stage.

"As Alzheimer's is a complex disease involving a number of different biological processes, it is likely that future treatment approaches will be most effective if they tackle the disease on multiple fronts," she said.

"While the findings in this study are interesting, rigorous clinical trials involving large groups of people are the only way to establish the effectiveness of any treatment."

Times 27 June 2016

## Time will tell if treatment passes test

### Analysis

A 54-year-old woman is struggling to find words and follow recipes (Oliver Moody writes). She wakes up in the mornings unable to recall what she has done the day before.

A brain scan reveals the tell-tale neural rot of Alzheimer's disease.

Three months later, her cognitive freefall has halted. She can read articles one day and remember them well enough to discuss them over the breakfast table the next morning. Now

she can babysit her grandchildren again.

Could the answer to memory loss be as straightforward as a programme of exercise, healthy eating, solid sleep, brain training and drugs that are already available?

There are very good reasons to be wary. When scientists want to test whether a treatment works, there is a long and well-trodden path to the doctor's surgery: you recruit as many patients as possible, you secure definite diagnoses and you take as many objective measurements of their health as you can get your hands on.

The Californian paper falls short on all three counts. These are only a small handful of middle-aged people who, while their lives were certainly torn apart by memory

### The Mend programme

- Fast for at least three hours before bedtime
- Low glycaemic index and low-cereal diet
- At least half an hour of exercise, four to six days a week
- Hormone supplements
- Melatonin to guarantee at least eight hours of sleep
- More than a dozen dietary supplements, including resveratrol, curcumin and vitamins D3 and K2

loss, did not always necessarily have Alzheimer's.

Much of the evidence is anecdotal and vague.

However, the thinking behind this programme is

good. Studies increasingly show that Alzheimer's is a perfect storm of genes, age, lifestyle, distorted blood flows in the brain and toxic accumulations of protein. It is not likely that the disease will yield to any single wonder drug.

If medicine ever does find a way to stem or even reverse the devastating decline brought on by this condition, it will be through lifestyle changes and early diagnosis as much as cutting-edge biochemistry.

Only time and much more careful assessment will tell whether the Mend programme can deliver on its extravagant promises to people with severe memory loss, let alone early-stage Alzheimer's. It deserves that chance.