

The helmet that could turn back the symptoms of Alzheimer's

By DAVID DERBYSHIRE

Last updated at 10:47 25 January 2008

An experimental helmet which scientists say could reverse the symptoms of Alzheimer's disease within weeks of being used is to be tried out on patients.

The strange-looking headgear - which has to be worn for ten minutes every day - bathes the brain with infra-red light and stimulates the growth of brain cells.

Its creators believe it could reverse the symptoms of dementia - such as memory loss and anxiety - after only four weeks.

Alzheimer's disease charities last night described the treatment as "potentially life-changing" - but stressed that the research was still at the very early stages.

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lead researcher at the University of Sunderland Dr Abdel Ennaceur and Durham University's Dr Paul Chazot are pictured with Dr Gordon Dougal and a prototype cognitive helmet

Around 700,000 Britons have dementia, with around 500,000 suffering from Alzheimer's disease.

The helmet is the creation of Dr Gordon Dougal, a director of Virulite, a medical research company based in County Durham.

It follows a study at the University of Sunderland which found infra-red light can reverse memory loss in mice.

Dr Dougal claims that only ten minutes under the hat a day is enough to have an effect.

"Currently all you can do with dementia is to slow down the rate of decay - this new process will not only stop that rate of decay but partially reverse it," he said.

Low level infra-red red is thought to stimulate the growth of cells of all types of tissue and encourage their repair. It is able to penetrate the skin and even get through the skull.

"The implications of this research at Sunderland are enormous - so much so that in the future we could be able to affect and change the rate at which our bodies age," he said.

"We age because our cells lose the desire to regenerate and repair themselves. This ultimately results in cell death and decline of the organ functions - for the brain resulting in memory decay and deterioration in general intellectual performance.

"But what if there was a technology that told the cells to repair themselves and that technology was something as simple as a specific wavelength of light?"

The study at Sunderland found that exposing middle-aged mice to infrared light for six minutes a day for ten days improved their performance in a three-dimensional maze. In the human trials, due to start this summer, the scientists will use levels of infra-red that occur naturally in sunlight.

Neuroscientist Paul Chazot, who helped carry out the research, said: "The results are completely new - this has never been looked at before."

An Alzheimer's Society spokesman said: "A treatment that reverses the effects of dementia rather than just temporarily halting its symptoms could change the lives of the hundreds of thousands of people. We look forward to further research to determine whether this technique could help improve cognition in humans."