

Magnets 'can cure depression'

by MARTYN HALLE, Daily Mail

Psychiatrists are carrying out trials using electrical magnets as a treatment for depression - targeting those people who fail to get better with conventional drug therapy.

The vast majority of patients get well with a course of modern antidepressants, but for a sizeable minority, drugs have little or no impact on their illness.

As a result, some of these patients are in and out of hospital as they battle with a depression they cannot beat.

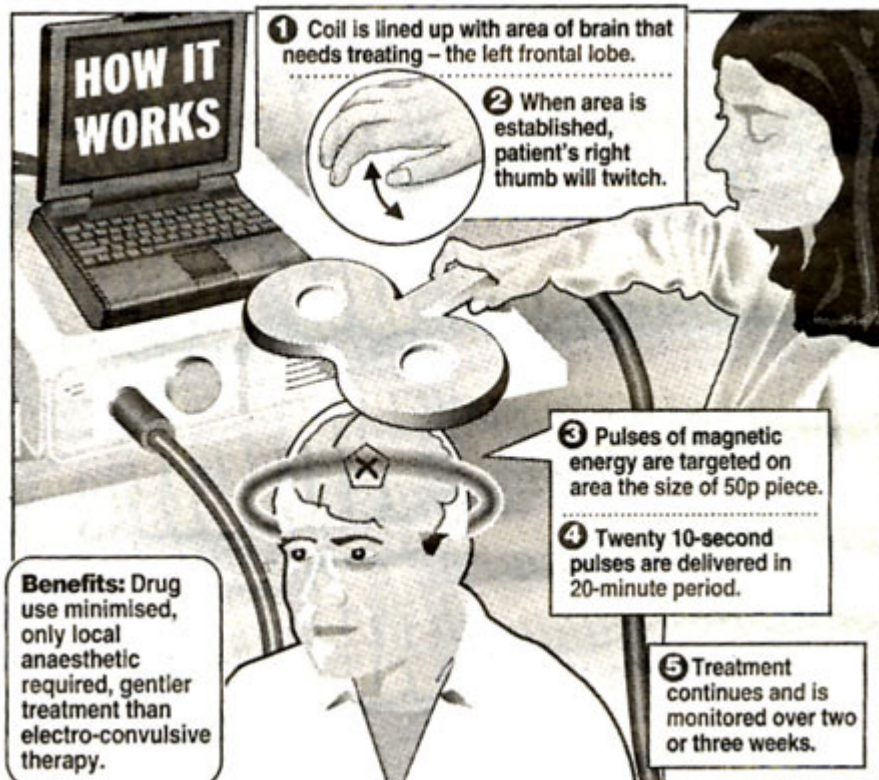
As a last resort, psychiatrists will turn to electro-convulsive therapy (ECT), using electrical currents to cause a brain seizure.

This is designed to restore normal electrical activity in the brain - and so lift depression.

But now doctors at the Maudsley Hospital in South London are experimenting with a much gentler approach to treating drug-resistant depression.

Transcranial Magnetic Stimulation (TMS) uses pulses of magnetic energy on a very small area of the brain where triggers for depression are thought to be centred.

Trials funded by the Department of Health are only just under way, but studies carried out elsewhere in the world show that the technique is at least as good as ECT, with TMS working for between 50 and 70 per cent of the patients who tried it.



It is estimated that between 10 and 30 per cent of people with clinical depression are either partially resistant or completely resistant to drug therapy, and doctors hope the new method will be of benefit to these.

Dr Declan McLoughlin, who is leading the research at the Maudsley, says psychiatrists have been looking for alternative treatments to ECT, which is seen as a last resort.

'While many patients do well using ECT, they would probably prefer to be given TMS because it is a gentler technique,' he says.

'Although ECT is now used much more selectively and is incredibly safe, there are some risks because a general anaesthetic is used.

There are also issues surrounding personality changes and loss of memory after treatment.

'The benefit of TMS is that it is a straightforward and painless procedure that doesn't involve a patient being induced to have a fit. And, because there is no need for a general anaesthetic, it doesn't require a whole medical team on hand.'

Treatment involves applying a magnetic field to the brain through a coil which is held over the scalp. Before treatment starts, the coil is lined up with the left frontal lobe - the area of the brain associated with mood disorders.

'The treatment area is the size of a 50p piece, and we establish that we are in the right place by sending magnetic stimuli through the scalp,' says Dr McLoughlin. 'If we are on target, it will cause the patient's right thumb to twitch.'

Magnetic therapy is then delivered in twenty 10-second pulses, with pauses in between. Treatment lasts about 20 minutes.

Patients are normally treated every day over several weeks, then assessed to see if there has been an improvement.

There are few side-effects, though some patients have a sensation similar to a finger being flicked against the side of their head, while others suffer mild headaches.

No one is clear how TMS works, but doctors suspect it is stimulating increased electrical activity in the area of the brain affected by depression.

'We know that there is less electrical activity in this area in those who are depressed, and research indicates that the pulses of magnetic waves lead to an increase,' says Dr McLoughlin.

Psychiatrists at the Maudsley are conducting two trials using the technique. One group of patients will get it as an add-on treatment to conventional antidepressants, to see if it will speed up their recovery. Patients will not know if they are being given real TMS or a placebo.

A second study will compare patients given TMS with a group given ECT.

For information about the TMS trial, please ring 020 7848 0548.

Read more: <http://www.dailymail.co.uk/health/article-192964/Magnets-cure-depression.html#ixzz0YNYrGKG>