guardian.co.uk
Health: best treatments
In partnership with the British Medical Journal BMJ Group

Vitamin B fails to help stroke patients

BMJ Group, Wednesday 4 August 2010 00.00 BST

A new trial has found that vitamin B supplements have no obvious benefit for stroke patients, dashing hopes that they might protect against a second stroke.

What do we know already?

If someone has had a stroke or mini-stroke, they're at risk of having another. Strokes are a major cause of death and disability, so it's important for doctors to do everything they can to prevent them. There are several options, such as drugs to lower blood pressure and cholesterol, and some people need to take drugs such as aspirin that prevent blood clots. Another option is surgery to clear blocked arteries leading to the brain.

There has also been interest in using B vitamins to prevent strokes. People seem to run a higher risk of a second stroke if they have high levels of a substance called homocysteine in their blood. Vitamin B supplements can lower someone's homocysteine levels, so it seemed logical that vitamin B would help prevent a second stroke. New research has put this theory to the test.

What does the new study say?

Vitamin B doesn't help to prevent strokes. The study looked at more than 8,000 people who'd already had a stroke, half of whom were given supplements containing vitamin B6, B12, and B9 (also known as folic acid). The other half were given inactive, placebo pills. After around three years, the supplements had made no clear difference to people's likelihood of having a stroke or a heart attack.

Overall, 16.9 percent of people taking a placebo had a stroke or heart attack. This compared with 15.1 percent of people taking the vitamins. Although slightly fewer people taking the vitamins had a stroke, statistical tests show the difference is small enough to be down to chance, rather than an effect of the treatment.

The vitamin pills didn't cause any side effects, according to the study.

How reliable is the research?

One problem with the trial is that about 3 in 10 people stopped taking their pills. People taking the supplements and people taking a placebo were equally likely to give up on treatment. While this accurately reflects the real world (where people are often

reluctant to keep taking pills over long periods), it does increase the chance that the study was biased against any benefits of vitamin supplements. However, the researchers repeated their calculations, this time missing out the people who stopped taking their pills, and still found that the supplements had no clear benefit.

Where does the study come from?

The study was published in The Lancet Neurology, which is owned by a company called Elsevier. Funding came from several organisations, including the Australian National Health and Medical Research Council and the UK Medical Research Council.

What does this mean for me?

The study found that B vitamins don't have any important benefits for people who've had a stroke and are trying to prevent another. It is possible that there's a small benefit, but if so, it's so small that the study didn't pick it up. It's also possible that the supplements are beneficial, but only in the longer term, since people in the study only took them for around three years.

What should I do now?

The study suggests that there's little to be gained in taking B vitamins to prevent a second stroke. However, the treatment seems safe, so if you particularly want to try it, it's unlikely to do you any harm. It's always a good idea to tell your doctor about any supplements or over-the-counter medicines you're taking, since they can sometimes interfere with prescription medicines.

From:

The VITATOPS Trial Study Group. B vitamins in patients with recent transient ischaemic attack or stroke in the VITAmins TO Prevent Stroke (VITATOPS) trial: a randomised, double-blind, parallel, placebo-controlled trial. http://www.thelancet.com/neurology Published online 4 August 2010, DOI:10.1016/S1474-4422(10)70187-3 1

To read more, see our information on stroke prevention.