Medical Xpress

Inexpensive drug to stop sight loss shown to be effective

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An inexpensive, but unlicensed drug to help prevent severe sight loss in older people has been shown to be safe and effective, finds a study published in the British Medical Journal today.

Bevacizumab (Avastin) is licensed as a treatment for bowel cancer, but it is widely used "off label" as a considerably cheaper alternative to the approved drug ranibizumab (Lucentis) to prevent wet age related macular degeneration (AMD) and several large trials comparing the two drugs are now underway.

Although ranibizumab was not included in this study (it was not licensed for use when the trial began) the researchers support its immediate implementation in healthcare systems whose budgetary limitations prevent patients' access to ranibizumab. In the majority of countries in the world, where either no treatment or inferior therapies are available to patients with wet AMD, the appropriate use of bevacizumab, a highly cost effective intervention, would have an immediate impact in reducing incident blindness from this condition, they say.

Wet AMD is the leading cause of visual loss in people over the age of 50 in Europe and North America. Visual loss is a result of progressive loss of light sensitive cells at the back of the eye due to damage from abnormal, leaking blood vessels. Sufferers do not go blind, but find it virtually impossible to read, drive, or do tasks requiring fine, sharp, central vision.

In 2006, researchers based at three UK eye centres, set out to test whether bevacizumab is an effective and safe treatment for wet AMD compared with standard NHS care available at the time.

A total of 131 patients aged at least 50 years with wet AMD were randomised to either bevacizumab injections at six week intervals or standard care (one of three different treatments available on the NHS at the start of the study). Visual acuity was measured at the start of the study (baseline) and then monitored over one year (54 weeks).

At one year, 32% of patients in the bevacizumab group gained 15 or more letters from baseline visual acuity compared with 3% in the standard care group.

In addition, the proportion of patients who lost fewer than 15 letters of visual acuity from baseline was significantly greater among those receiving bevacizumab treatment (91%) compared with 67% in the standard care group.

Average visual acuity increased by seven letters in the bevacizumab group with a median of seven injections compared with a decrease of 9.7 letters in the standard care group, and the initial improvement at week 18 was sustained to week 54.

Bevacizumab treatment was associated with a low rate of serious adverse events.

These results show that bevacizumab injections given at six weekly intervals for wet AMD is superior to the standard care available at the start of the trial, say the authors. This trial provides level-one evidence for the use of bevacizumab injections for the treatment of wet AMD, they conclude.

In an accompanying editorial, Professor Usha Chakravarthy from the Royal Victoria Hospital in Belfast says that, although this trial fills a gap in the evidence base and shows robustly that bevacizumab is better than previously employed treatments, it does not tell us whether the drug is as effective as ranibizumab. And she warns that "the off label use of bevacizumab should not be encouraged until the large randomised trials comparing it with ranibizumab report their findings."

Provided by British Medical Journal