

Canadian discovery may treat lazy eye in adults



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Canadian scientists have discovered a way to help adults treat lazy eye, a condition that doctors have long believed could only be cured in children.

Researchers have found that 15 minutes of exposure to a magnetic pulse that is held to the head improves function in a lazy eye for about 30 minutes.

When the study subjects were shown two patterns of lines, one of fine lines and one of thicker, easier to see lines, they needed less colour contrast to see the finer lines after the treatment.

The treatment is called repetitive transcranial magnetic stimulation (rTMS), and involves holding a coil, which emits a rapid series of magnetic waves, to the side of a patient's head.

While the benefit is temporary, research is already underway to test if increased exposure time to the magnetic pulses would result in a longer period of vision improvement.

Lazy eye, also known as amblyopia, is the most common form of vision impairment in one eye. It affects as many as six million people in the United States alone.

It occurs when the muscles in one eye are not as strong, which causes poor sight in that eye and makes it turn inward or outward.

When the condition is diagnosed in children, they usually wear an eye patch over the good eye to build strength in the weaker eye. The treatment is often successful in children, but not so in adults.

Doctors have long believed that if the condition was not diagnosed well before the age of 12 it was untreatable, because the areas of the brain that control vision are not pliable. However, this new research suggests the adult visual cortex is, indeed, malleable.

"There is real momentum now to find a treatment for adult amblyopia," one of the study's authors, McGill University's Benjamin Thompson, said in a statement.

The research team included scientists from Montreal's McGill University and Royal Victoria Hospital.