

Could regular pot smoking harm vision?

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(HealthDay)—Smoking pot regularly may be linked to a limited degree of vision impairment, a new French study suggests.

The finding stems from very preliminary research involving just 52 participants, 28 of whom were regular marijuana users. That meant they used marijuana at least seven times a week.

The question posed in the study: Does marijuana affect the healthy functioning of [retinal ganglion cells](#) (RGCs), which are situated on the surface of the retina? These cells receive incoming visual information, and are considered the first link in the pathway that connects the retina to the part of the brain where eyesight is processed.

The answer: Regular pot users do appear to experience a slight delay in their RGC signaling. And that could indicate impaired vision, the study authors said.

Still, experts stressed that the findings remain preliminary and people shouldn't be overly alarmed by the findings.

And, according to study author Dr. Vincent Laprevote, his team now have to "measure if this delay is permanent, or recedes with cannabis cessation." Laprevote is a hospital practitioner at the Pole Hospitalo-Universitaire de Psychiatrie du Grand Nancy in Laxou, France.

His team noted that marijuana has long been known to have an impact on nervous system communications.

To explore the possibility that this might include vision function, the French scientists conducted neural signaling tests to compare RGC function between regular pot smokers and nonsmokers.

Those tests determined that regular pot users experienced a 10-millisecond delay in the speed with which their RGCs sent key signals to the brain via the optic nerve.

The findings were published online Dec. 8 in the journal *JAMA Ophthalmology*.

Although the result could signal the potential for vision trouble, the team noted that it did not necessarily prove that regular smokers do actually experience [vision impairment](#). The association seen in the study also did not prove that pot use actually caused the delay in RGC signaling, the researchers said.

Laprevote also pointed out that most of the participants did not complain of any vision issues before the study began. He suggested, however, that smokers might be experiencing vision trouble without being consciously aware of it.

Dr. Christopher Lyons co-authored an editorial that accompanied the study. He said that "the evidence [in the study] for decreased retinal function is weak for several reasons."

Lyons pointed to the extremely small pool of patients, as well as the lack of visual impairment symptoms prior to the study, and a lack of clarity on additional lifestyle factors that could have affected the results, such as diet and cigarette smoking history.

Lyons, who is a professor in the department of ophthalmology and visual sciences at the University of British Columbia in Vancouver, still described the research as "timely," given the increasing trend towards legalization of marijuana in the United States, for both medical and recreational use.

Also, [medical marijuana](#) has been promoted as an alternative treatment for the vision-robbing condition glaucoma, because research has shown it can lower blood pressure in the optic nerve for short periods of time. However, the American Academy of Ophthalmology does not

recommend medical marijuana for glaucoma patients.

Lyons suggested that "further, more robust studies are needed to test whether long-term use of cannabis has any effect on retinal or [optic nerve](#) function."

But Paul Armentano, deputy director of NORML, the nonprofit [marijuana](#) advocacy organization, argued that "it remains unclear at this time whether or not these findings possess any real-world significance."

Armentano said, "Given the reality that tens of millions of people consume cannabis regularly, and that people around the world have been consuming cannabis for generations, one would presume that any potential adverse effects on [vision](#) would have been previously documented. Or that they are, at worst, nominal to the overwhelming majority of those who consume the substance."

More information: There's more about marijuana at the [U.S. National Institute on Drug Abuse](#).

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