

# What You Should Know About Viagra (Sildenafil) Side Effects Involving the Eye

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## What is Viagra and what is the concern?

Viagra is a drug used to treat patients with erectile dysfunction. Three to 11% of men taking 25-100 mg develop symptoms of a blue tinge to vision. Sometimes sensitivity to light occurs. These eye symptoms are uncommon. The drug routinely causes a stuffy nose and increased tearing that lasts 3-4 hours.

## What is the mechanism of toxicity?

Viagra works by inhibiting cyclic guanosine monophosphate dependent phosphodiesterase-5 found in the corpus cavernosum smooth muscle cells of the penis. Retinal cone and rod cells contain a closely related enzyme, guanosine monophosphate dependent phosphodiesterase-5, which the drug weakly inhibits. As a result, the electroretinogram a- and b-wave amplitudes are reduced for several hours after Viagra ingestion reflecting altered phototransduction.(1)

## Is Viagra harmful to the eye?

Although the above mentioned side effects involving the eye occur, there is no evidence of harm to the eye. Specifically, men with macular degeneration have been studied before and after taking the drug. No adverse effects were noted. (2)

After reading this information, If you would like to learn more about Viagra and the eye, an excellent resource is the Pubmed site on the National Library of Medicine web page at the following link:

<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>.

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## Reference List

- (1) Gabrieli CB, Regine F, Vingolo EM, et al. Subjective visual halos after sildenafil (Viagra) administration: electroretinographic evaluation. *Ophthalmology* 2001; 108:877-881.
- (2) Birch DG, Toler SM, Swanson WH, et al. A double-blind placebocontrolled evaluation of the acute effects of sildenafil citrate (Viagra) on visual function in subjects with early-stage age-related macular degeneration. *Am J Ophthalmol* 2002; 133:665-672.