

## Tetryzoline

### Anterior and posterior segment vasculopathy: case report

A 45-year-old woman developed anterior and posterior segment vasculopathy [*time to reaction onset not stated*] following administration of tetryzoline [tetrahydrozoline hydrochloride] as an ophthalmic decongestant.

The woman, who had been using tetryzoline [*dosage not stated*] in both the eyes twice daily for 25 years as an ophthalmic decongestant, presented to an ophthalmology clinic with worsening bilateral conjunctival corkscrew vessels. Nine months prior to the presentation, she had discontinued using tetryzoline; however, she reported no improvement since the discontinuation. The fundus examination of her right eye revealed dilated, tortuous retinal arteries and veins with otherwise normal optic disc and retina. The remainder of her ocular examination, including vision, intraocular pressure and extraocular motility, was found to be normal. An assessment by a retinal specialist and fundus angiography were unremarkable. An MRI and angiography of the brain and orbits were found to be normal. The results for her blood cell counts and thyroid testing were also found to be normal. At a follow-up six months later, there was no change in the appearance of her eyes.

**Author comment:** "*Anterior and posterior segment vasculopathy associated with long-term use of tetryzoline [tetrahydrozoline] should be considered a potential adverse effect when physicians counsel patients about its use.*"  
"*Tetryzoline [tetrahydrozoline] is an  $\alpha$ -adrenergic agonist that causes vasoconstriction and is used in over-the-counter ophthalmic decongestants.*"

Kisilevsky E, et al. Anterior and posterior segment vasculopathy associated with long-Term use of tetrahydrozoline. CMAJ: Canadian Medical Association Journal 190: E1208, No. 40, 9 Oct 2018. Available from: URL: <http://doi.org/10.1503/cmaj.180519> - Canada

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