

President's Insights May 2021

May is [Healthy Vision Month](#) which is part of the Vision Health Initiative directed by the United States Center for Disease Control and Prevention (CDC). The CDC is promoting a comprehensive dilated eye exam to check for common vision and eye problems.

In the United States and Canada optometrists are licensed to use diagnostic pharmaceutical agents such as dilating drops. The most common dilating drop is tropicamide and it comes in two concentrations, 0.5% and 1%. Tropicamide temporarily inhibits the parasympathetic constrictor muscle in the iris, opening the pupil from a normal 3 or 4 mm to 5 or 6 mm. In general, this is a very safe procedure and only lasts a few hours. Allergic reactions are uncommon. In some individuals with narrow anterior chamber angles, the procedure can initiate an acute narrow angle glaucoma attack, but this is very rare and it's important to screen for narrow angles before instilling the dilating drops.

With the pupil larger, it is much easier for the optometrist or ophthalmologist to look through the pupil to the optic nerve, retina, blood vessels, and vitreous to detect any eye disease. In all cases, it is much better to prevent disease than it is to treat disease. And if disease is present, it is much better to treat an early stage of a disease than a later stage. This is why dilating the pupil and checking inside the eye is so important for maintaining eye health.

It is for this reason that people living with diabetes should be dilated every year to inspect for any sign of early diabetic eye disease. Diabetes tends to adversely affect the small blood vessels in the body and there are a lot of small blood vessels in the eye. Furthermore, every optometrist-patient encounter allows the optometrist to remind the patient about the importance of blood sugar control through diet, light exercise, and medication when needed.

In many countries optometrists are not allowed to administer dilating drops. What then? Well, it is possible to look through the natural pupil, but it is simply more difficult. The bright light tends to constrict the pupil further. The optometrist can turn down all the ambient room lighting, turn down the ophthalmoscope light, and even make the diameter of the light smaller. Doing all of these steps might allow the optometrist to view the optic nerve, macula, and blood vessel arcade without dilation. As we get older the parasympathetic increases and sympathetic innervation decreases making the pupil get smaller and smaller with age. That just makes it more difficult to see inside the eye, and with older patients the chances of disease increases. This is why it is important for optometrists to advocate for the right to administer these safe and effective diagnostic medications.

There are relatively new technologies in diagnostic instrumentation called non-mydriatic fundus cameras. These cameras can obtain a clear image of the optic nerve, macula, and blood vessels without the use of diagnostic pharmaceutical agents. Sadly, these cameras are relatively expensive and out of reach for many countries where the profession of optometry is still

developing. While they might be able to help out in some circumstances, it would be best for our highly-educated, well-trained optometry graduates to be able to dilate the pupil when needed to screen for and prevent eye disease. VOSH/International supports advocacy to broaden the scope of practice for optometry graduates and improve eye health and disease prevention throughout the world.

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For more information:

<https://www.cdc.gov/visionhealth/healthyvisionmonth/index.htm>