What are optic disc drusen?

Optic disc drusen are abnormal deposits of benign material in the optic disc, the front part of the optic nerve that joins each eye to the brain. We do not know the exact cause of optic disc drusen. About 1% of people have them. Optic disc drusen may be inherited or may occur without any family history. In children, they often are deep in the optic disc and hard to see. Over time, they can slowly become larger and move closer to the surface of the optic nerve.

Optic disc drusen can look like swelling of the optic nerve. Papilledema is the medical term for swelling of the optic nerve from high pressure inside the head. Pseudopapilledema means false optic nerve swelling, and optic disc drusen are a leading reason for pseudopapilledema. True papilledema is a dangerous condition that can be a sign of a brain tumor or other serious problem, and papilledema can lead to major vision loss. In contrast, optic disc drusen and other kinds of pseudopapilledema are not a sign of a brain tumor or another dangerous problem.

How do optic disc drusen affect me?

Patients with optic disc drusen usually do not notice any vision problems. Occasionally, patients may have flickering or graying out of vision that lasts a few seconds, or they may notice missing areas of vision. Over time, up to 70% of patients with optic disc drusen have some decrease in peripheral vision, which is typically mild. Visual field testing (called perimetry) can be used to check the peripheral vision.

Because optic disc drusen can make the optic nerve appear swollen, patients with them should inform any doctor examining their eyes to help avoid unnecessary alarm and testing.
Why do I need to see a neuro-ophthalmologist?

A neuro-ophthalmologist is an optic nerve specialist. Neuro-ophthalmologists are experienced and trained in deciding whether an optic nerve looks swollen from optic disc drusen or from other causes to avoid unnecessary worry and testing. Different tests may be used to evaluate your optic nerve to look for optic disc drusen.

Rarely, abnormal blood vessels related to optic disc drusen may form and cause vision problems. Early detection and treatment of the abnormal blood vessels can reduce the effects on vision. Optic disc drusen can make diagnosing diseases that affect the optic nerve more difficult, and a neuro-ophthalmologist will look for signs of any such diseases.

Are there treatments for optic disc drusen?

There is no proven treatment for drusen, and there is no proven way to prevent the optic disc drusen from increasing in size. Once you have been diagnosed with optic disc drusen, your neuro-ophthalmologist or your regular eye doctor typically monitors your eyes periodically to look for any potentially related problems.

Resources

- **American Association for Pediatric Ophthalmology & Strabismus**  
  https://aapos.org/glossary/optic-nerve-drusen
- **American Academy of Ophthalmology**  
  https://www.aao.org/eye-health/diseases/drusen-list

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