Semaglutide And NAION

A research study by Harvard and the Massachusetts Eye and Ear Infirmary recently published their findings on the use of **semaglutide** (Ozempic, Wegovy; Novo Nordisk) and a rare form of permanent vision loss, **nonarteritic anterior ischemic optic neuropathy (NAION)**.

What Is NAION?

Nonarteritic anterior ischemic optic neuropathy (NAION) is a rare but potentially severe cause of permanent vision loss in adults. Although it is known to be the second-most common optic nerve disorder in adults over age 50 (glaucoma is the most common optic nerve disease), it is significantly less common than glaucoma.



How Many People In The US Have NAION Compared To Other Common Conditions?

NAION is defined as a sudden loss of blood supply to the optic nerve, causing sudden, painless loss of

a part of the vision in one eye and optic nerve swelling. It is not caused by a clot or cholesterol plaque.

Although the exact trigger for NAION remains unclear, there are known risk factors, which include diabetes (types 1 or 2), heart disease, history of heart attack, high blood pressure, and obstructive sleep apnea.

Currently there is no proven treatment for NAION.

Vision loss is often permanent and can be severe.



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What Did The Harvard Study Show?

The Harvard neuro-ophthalmology team, led by Dr. Joseph Rizzo, had noticed that many of the patients referred to them for NAION were also taking semaglutide. This observation led them to ask the question, "are patients with type 2 diabetes or who are overweight or obese taking semaglutide more likely to have NAION than similar patients who are not taking semaglutide?"

What The Study Can Tell Us:



Careful analysis by the Harvard research team identified a **potential (but not definitive)** link between semaglutide prescriptions and NAION in patients seen by neuro-ophthalmologists.



NAION remains a very rare disease.



This report should and will inspire more research to address many unanswered questions.

What The Study Cannot Tell Us:

- Does semaglutide truly increase the risk of NAION?
- Who should (or shouldn't) take semaglutide? Who should stop?
- Why and how might semaglutide affect the risk of NAION, including in patients with previous NAION?
- Are similar medications, like tirzepatide (Zepbound, Mounjaro), linked to NAION?



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What Do We Do Now?

This research study was a thoughtful look at a potential rare link that had not been previously reported. However, more research is necessary before we can make any firm conclusions.

Is Semaglutide Safe For Me?

- Semaglutide was rigorously studied in several randomized, controlled trials worldwide. The U.S. Food and Drug Administration approved semaglutide for medical use in 2017. Many millions of people take this medication throughout the world without developing NAION.
- This is the first study to report a possible connection between semaglutide prescriptions and NAION. Because many patients taking semaglutide are already at risk for NAION, we do not know how strong of a link there is or if semaglutide directly causes NAION yet.
- The proposed increased risk of NAION is much lower than the overall health risks to someone who needs semaglutide. If you are currently taking semaglutide, don't stop taking semaglutide without consulting with your prescribing doctor.

What Should I Be Watching For?

- Because NAION is very rare and there are many diseases that have similar symptoms, any sudden and severe vision change should be evaluated urgently by an eye doctor.
- Previous studies have reported temporary vision changes associated with the initiation of semaglutide in diabetic patients, often related to the change in blood sugar levels.

Talk with your eye doctor or go to the emergency department immediately if you suddenly lose vision.

