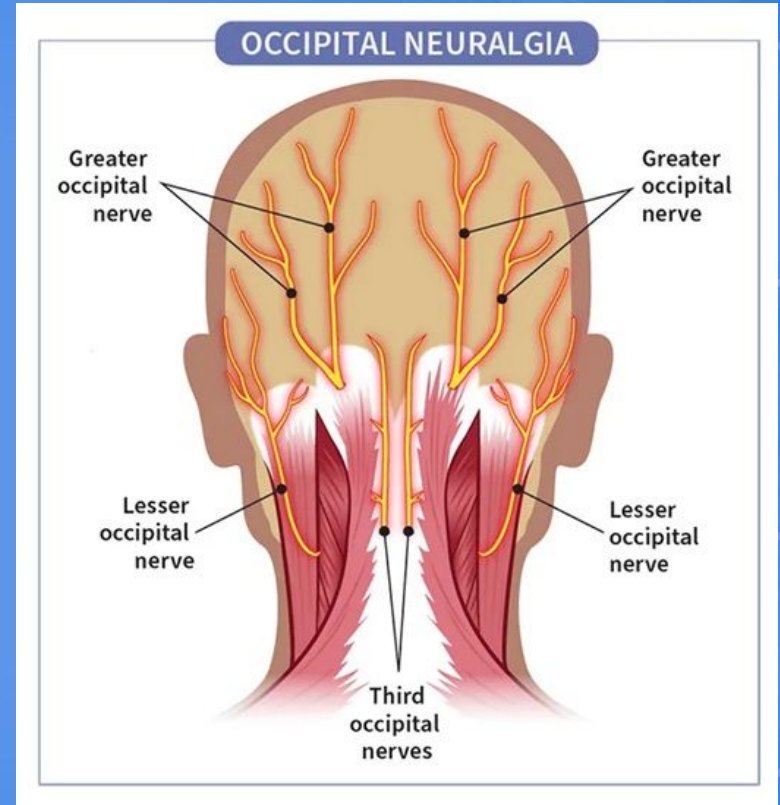


Occipital Neuralgia

By Caitlyn McCollum

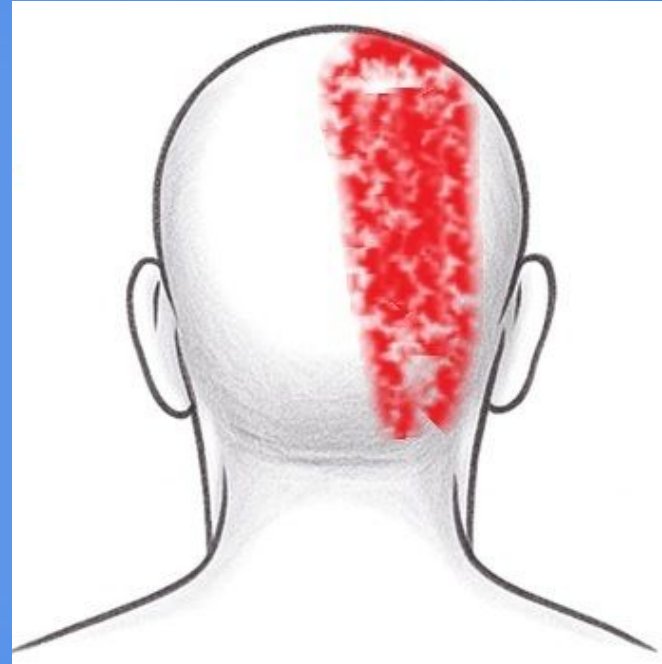
What is Occipital Neuralgia?

- Occipital neuralgia is a headache disorder that affects your occipital nerves
- Occipital nerves are the nerves that run through your scalp
- You may experience sharp, stinging or burning sensations on your scalp or behind your eye



Patient Presentation & Symptoms

- Intense, sharp pain that can mimic electric shock sensation
- Pain on one or both sides of the head
- Sensitivity to light
- Tender scalp
- Pain when moving the neck



Differential Diagnosis

- Any disorder that presents with a headache or facial pain
 - Migraine
 - Cervicogenic headache
 - Cluster headaches
 - Temporal arteritis
 - Arnold-Chiari malformation



Tests, Confirming Occipital Neuralgia

- MRI Brain - negative for tumors
- MRI Neck - negative for neck disorders
- Blood Tests - negative
- X-rays - negative
- Lumbar puncture - negative
- Mostly confirmed by a anesthetic blockade of suspected nerve



Types of Doctors

- Primary Care
- Neurologist
- Neurosurgeon
- Pain Specialist
(anesthesiologist)
- Physiatrist



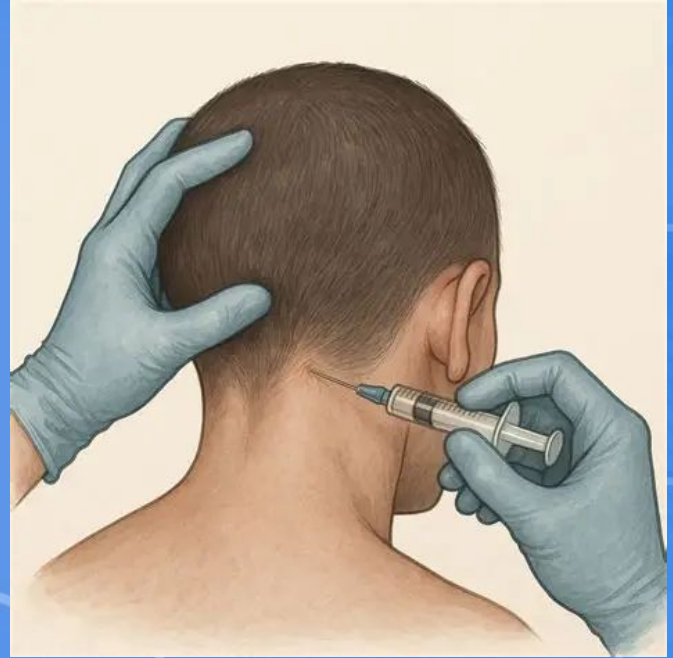
Confirmed Diagnosis

- Pain relief with the nerve block
- Confirmed after two nerve blocks are performed
 - False positive results after one block of 40%
- Imaging should be performed if there is suspicion of a lesion or mass at the affected site



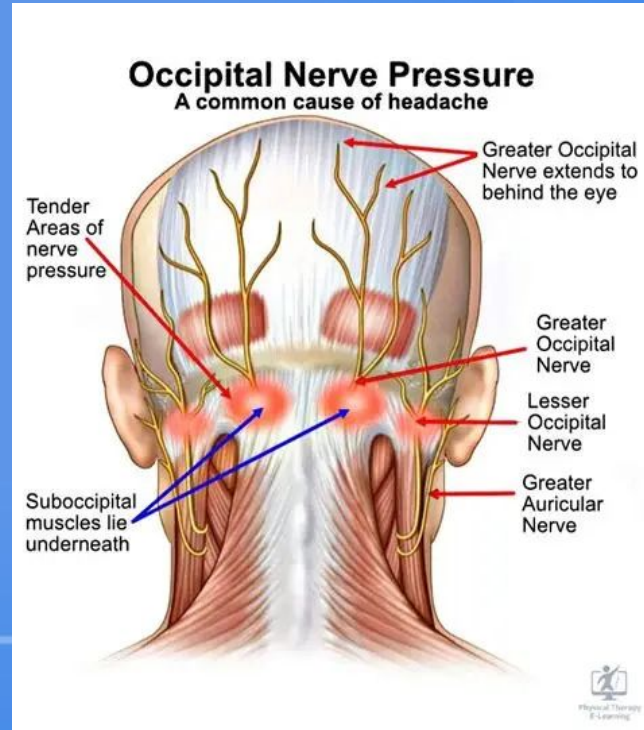
Treatment

- Immobilization of the neck
- Non-steroidal anti-inflammatory drugs
- Nerve blocks
- Steroid added to the local anesthetic



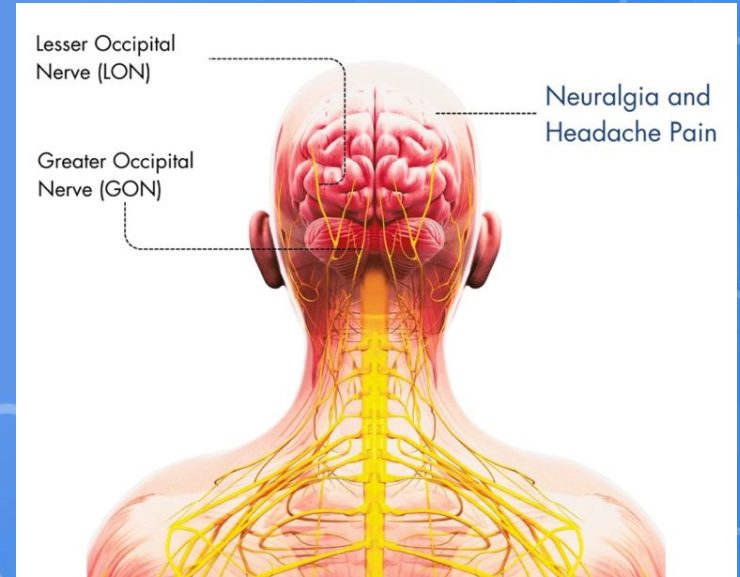
Facts About Occipital Neuralgia

- Rare Disease, 3.2 per 100,000 people annually
- Compressed Nerves
- Difficult to Treat
- Difficult to Identify



Causes of Occipital Neuralgia

- **Myofascial and muscular compression**
Chronic tightness or inflammation in the muscles at the base of the skull
- **Cervical spine degeneration**
Degenerative changes in the upper neck
- **Post-traumatic or whiplash injury**
Stretching or micro injury of the proximal nerve trunk
- **Vascular contact or compression**
Small blood vessels nerve root inside the spinal canal can cause the pain
- **Post-surgical or Post-anesthetic Scarring**
Scar tissue that forms after surgery in the upper neck or posterior base of the skull
- **Systemic inflammatory or metabolic causes**
Diabetes, vasculitis, gout, infection, or rarely tumor

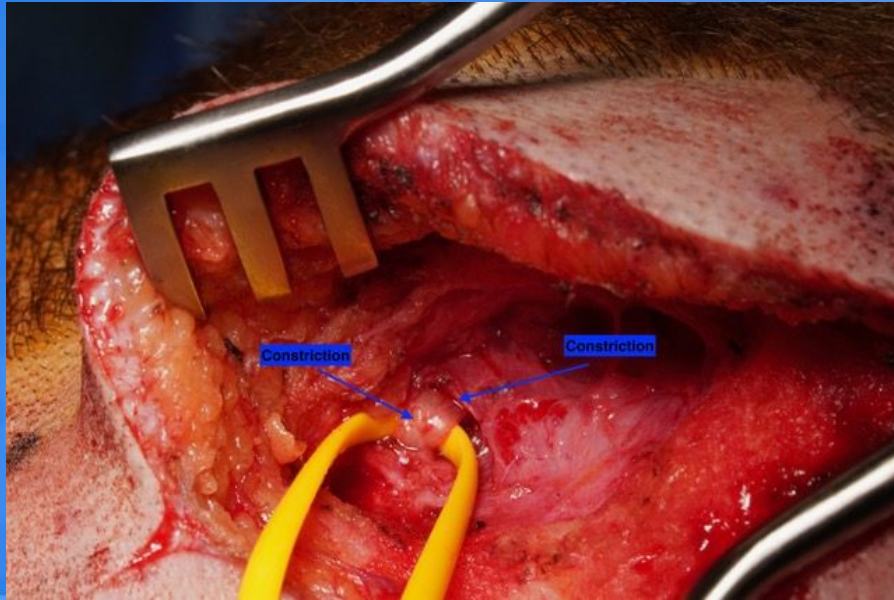


When Conservative Treatment Fails

- Occipital Nerve Decompression Surgery
- Considered experimental even though it's been around for a decade
- Nerve Surgeon specializing in peripheral nerves performs the operation
- Success is reducing pain by 50%
- Over 90% success rate

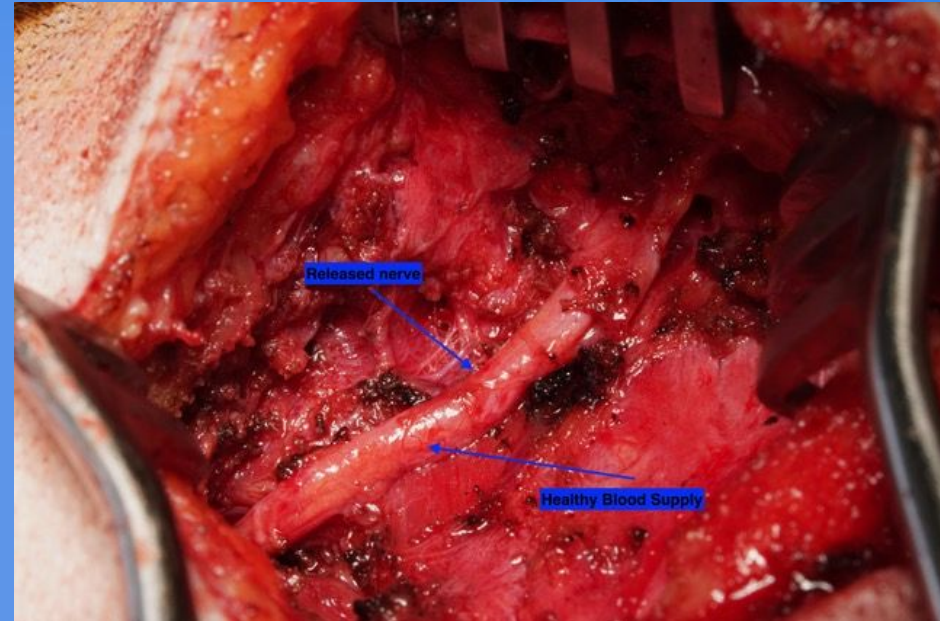


Surgical Photographs



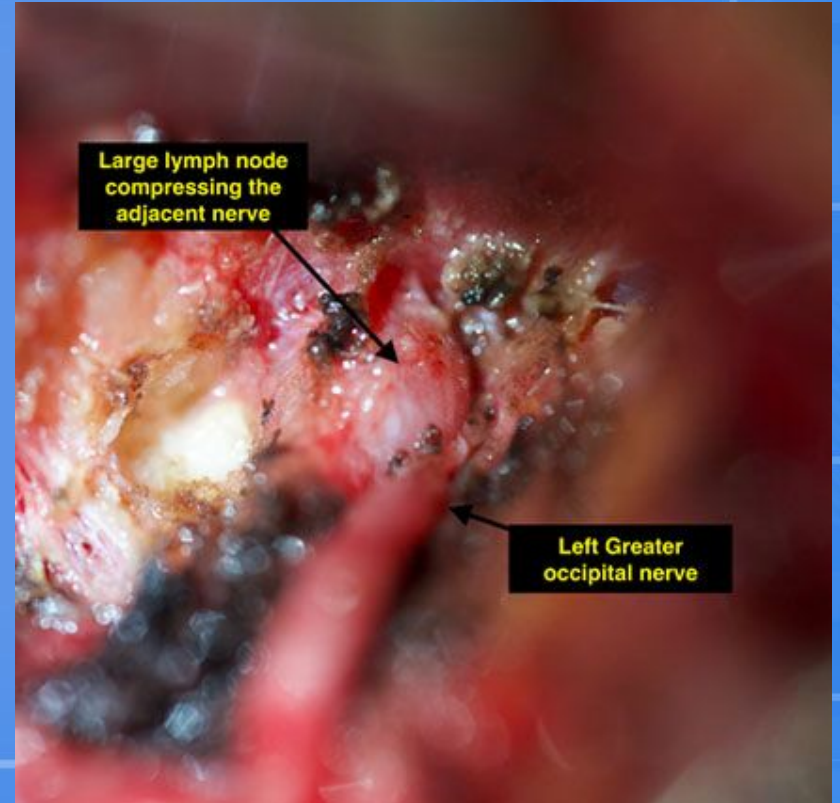
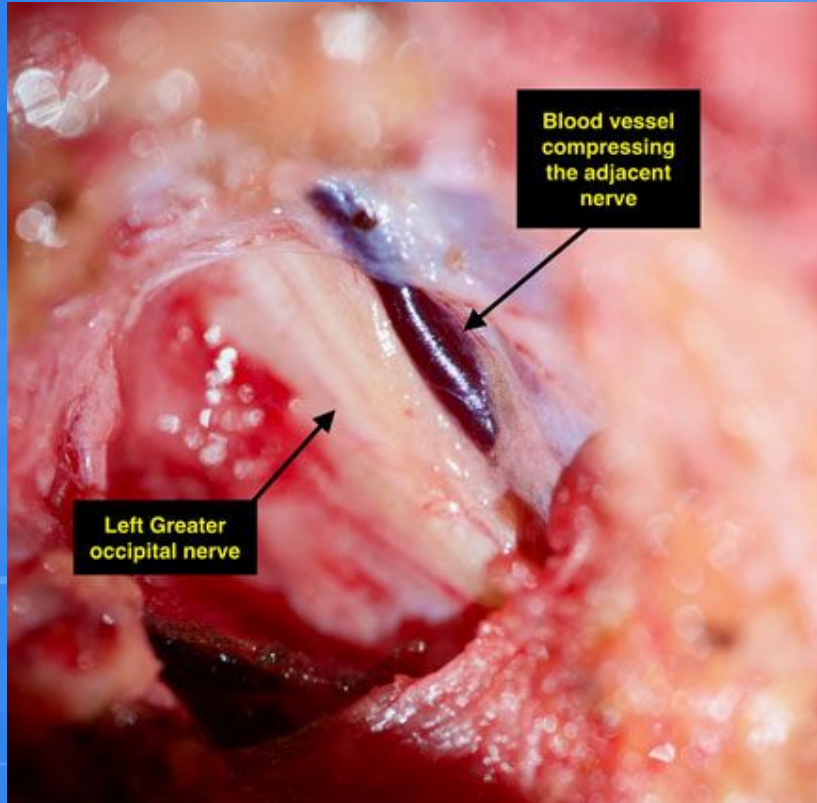
This photo shows the occipital nerve as it is first encountered during surgery. The nerve can be seen to be constricted by the surrounding muscle, causing irritation that is causing this patient's migraine headache pain.

<https://www.headachesurgery.com/occipital-nerve-decompression-migraine-surgery/>



Following the release of the nerve, it can be seen here in this photo as plump and healthy, no longer compressed by the surrounding tissue. Healthy blood supply can now be seen around the nerve, as it appears more pink than white as the first photo shows.

Blood Vessel and Lymph Node Compression

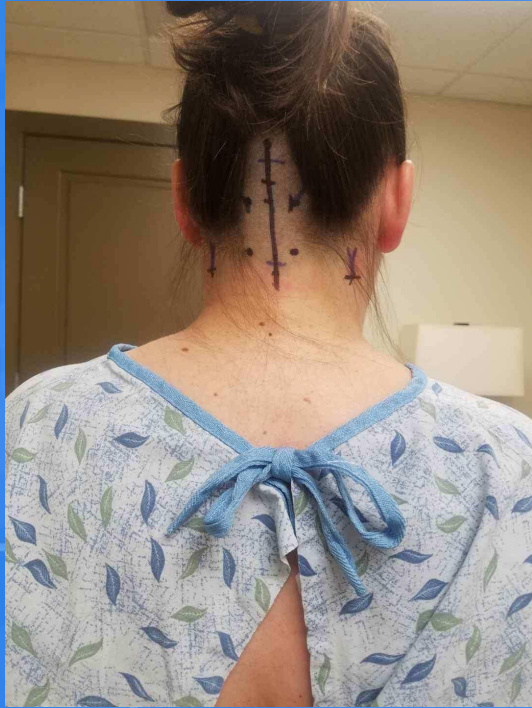


Why Occipital Neuralgia

- My mom was sick for 4 years before she had surgery for Occipital Neuralgia
- I saw the pain she was in and wanted to learn more about her condition
- Started Aug 24, 2015
- Ended March 19, 2019 with a final Surgery July 29, 2019
- Fully healed after the two surgeries

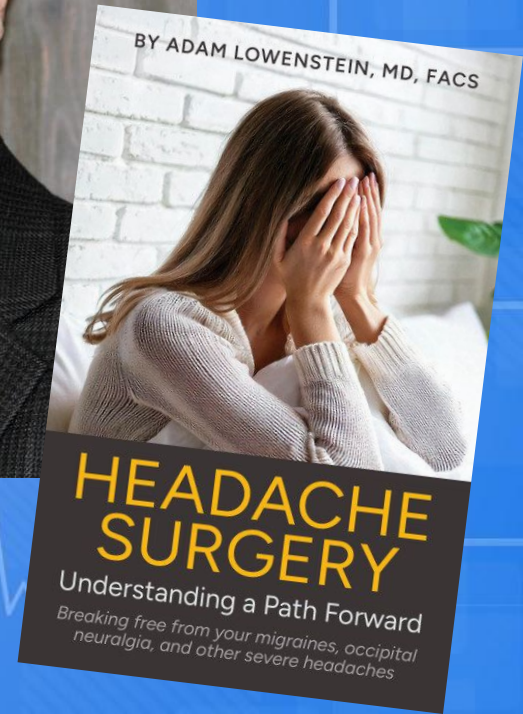


Surgical Photographs (my mom)



Dr. Adam Lowenstein

- He healed my mom
- My mom's story is in his book
- She was also interviewed by Dr. Lowenstein in his podcast



Sources

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