

Back to the Bedside: Indirect Osteopathic Manipulative Treatment to Treat Occipital Neuralgia

Adrianna Taweel DO, Astha Saini DO, Silvia Novakova DO, Nadera Dabbain DO, Shaheena Raheem DO

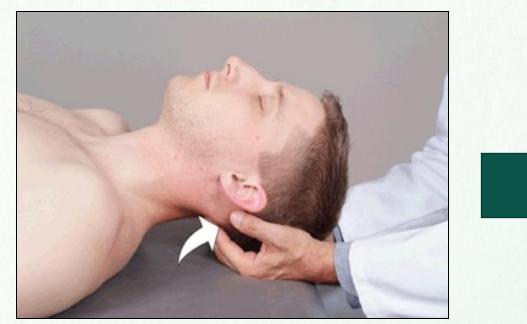
Department of Internal Medicine, Detroit Medical Center and Wayne State University School of Medicine

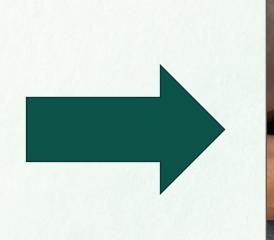
Introduction

- Occipital Neuralgia (ON) is a headache disorder that provokes neuropathic pain along the distribution of the occipital nerve.
- ON most widely affects older women.
- Common triggers of ON include: tactile stimulation of tender point and muscle tightness in the posterior neck.
- Treatment modalities are currently limited to pharmacologic and surgical management.

Case Presentation

- A 68-year-old man presented with acute radiating pain originating from his posterior neck to bilateral occiput.
- Neurology diagnosed him with occipital neuralgia based on the International Classification of Headache Disorders (ICHD-3) criteria.
- He was started on gabapentin and topical capsaicin, but continued to have sharp, shooting headaches.
- On Day 3, he underwent an Osteopathic evaluation which revealed OA FSRRL and positive left posterolateral tender points over PC3 and 4.
- He was treated with suboccipital release and counterstrain, with immediate relief of his headaches.
- He was discharged the following day with a plan to follow up in the resident-continuity clinic in 2 weeks for osteopathic manipulative treatment (OMT).





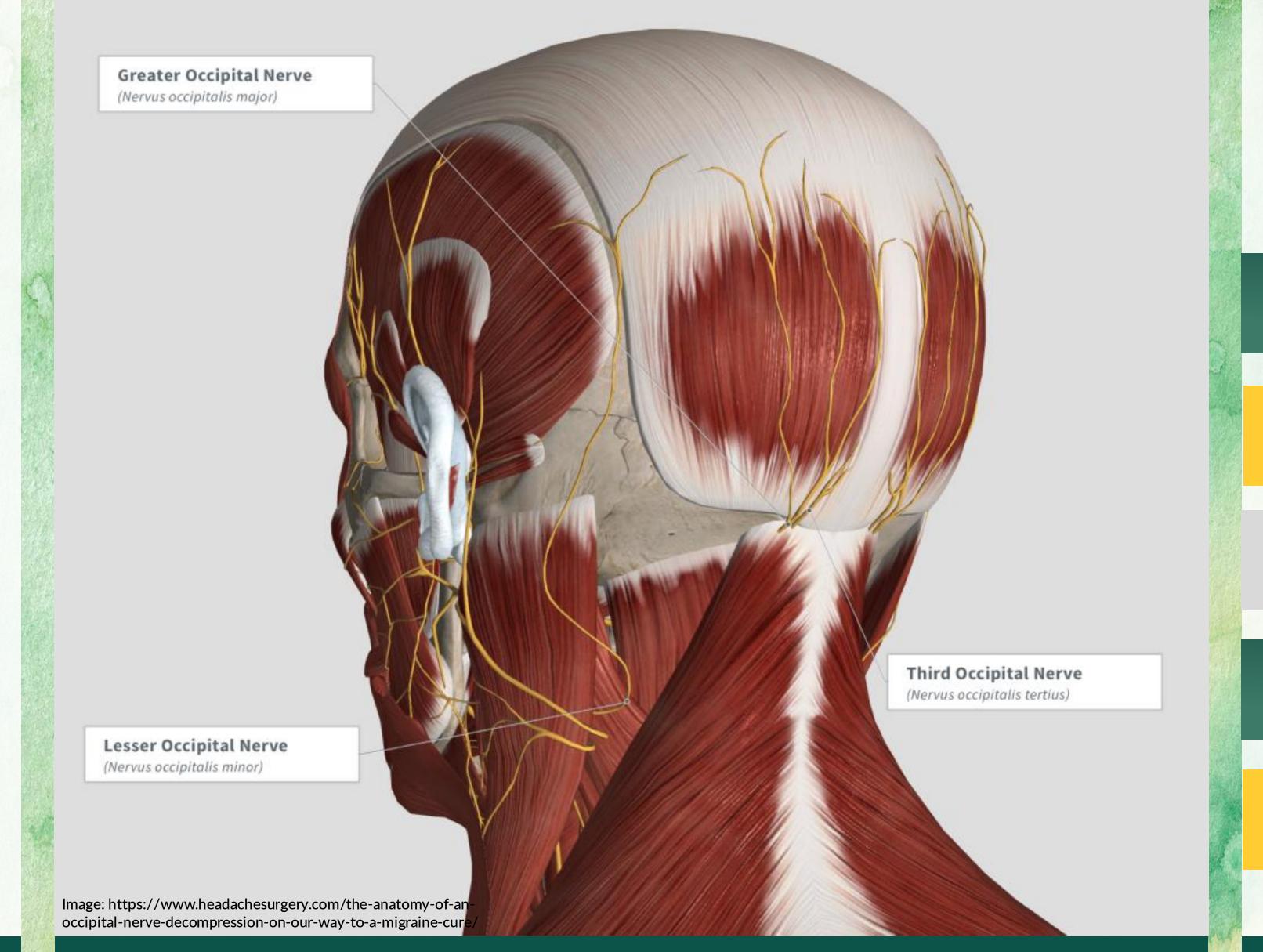


Images courtesy of amboss.com

Literature Review

- Occipital neuralgia (ON) is hypothesized to result from nerve entrapment in the cervical musculature which causes shooting pain along the dermatomal distribution of the occipital nerve.
- Osteogenic and muscular cervical changes, specifically in C1-C2 can exacerbate ON.
- Occipital nerve block is the primary treatment, but conservative management includes tricyclic antidepressants and antiepileptics.
- OMT is used to treat various types of headaches, however OMT is not well described in treatment for occipital neuralgia.

Anatomy Review



Conclusion

- With the ubiquity of imaging, we often fail to rely on our physical exam, especially our osteopathic evaluation.
- OMT was pivotal in our patient's care as it provided him with immediate relief and avoided the misuse of pharmacological therapy.
- Given the pathophysiology of ON, there is value in adding OMT to standard therapy.
- In patients that are not responding to conventional therapy, an osteopathic evaluation should be considered.
- There is much research to be done on the benefit of OMT in ON, but based on pathophysiology of the disease process, it is only fitting that OMT be used in conjunction with conventional therapies.

References

Cesmebasi, A., Muhleman, M. A., Hulsberg, P., Matusz, P., Tubbs, R. S., & Loukas, M. (2014). Occipital neuralgia: Anatomic considerations. Clinical Anatomy, 28(1). https://doi.org/10.1002/ca.22468

Choi, I., & Jeon, S. R. (2016). Neuralgias of the Head: Occipital Neuralgia. Synapse, 31(4). https://doi.org/10.3346/jkms.2016.31.4.479

Jara Silva C E, Joseph A M, Khatib M, et al. (August 09, 2022)
Osteopathic Manipulative Treatment and the Management of Headaches: A Scoping Review.
Cureus 14(8): e27830. https://doi.org/10.7759/cureus.27830

Rowlands, E., & Pozun, A. (2023, March 8). Osteopathic Manipulative Treatment: Suboccipital Release. NCBI StatPearls. Retrieved June 20, 2023, from https://www.ncbi.nlm.nih.gov/books/NBK582126/?report=printable