Osteopathic Treatment of Headache in the Emergency Department

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Introduction

Osteopathy in the cranial field (OCF) was popularized by William Garner Sutherland in the early to mid-1900s. The cranial concept is an extension of Dr. Still's science of osteopathy and is perceived as a subtle movement within the cranial bones that has fluid continuity with all tissues of the body. Although a nucleus of osteopathic physicians utilize this treatment modality in daily practice, robust research is lacking.

This case demonstrates the utility of OCF as an adjunctive treatment of headache in the emergency department. After ruling out intracranial hemorrhage and stroke, the patient was treated with a headache cocktail without improvement. Treatment options were limited due to patient's multiple drug allergies or aversions.

Case Presentation

PMH: CKD, heart failure, a-fib on Eliquis, hyperlipidemia, and childhood migraines.

HPI: A 73 year old male presents to the ED with 2 hours of sudden onset headache. He describes the headache as throbbing and stabbing and located near the posterior aspect of his left orbit. He rates the severity 10/10. He has not tried anything to relieve the headache. He has monthly headaches but nothing this severe.

ROS: He denies acute trauma, weakness, numbness, facial droop, nausea, vomiting or aura.

Physical Exam:
CN II-XII intact bilaterally. No extremity weakness or numbness.
Cranium: Fascial restriction along the petrous ridge of the left temporal bone extending across the midline into the right tentorium cerebelli. Associated internal rotation of the left aspect of the frontal bone and significantly decreased mobility of left temporal bone in internal and external rotation.
Neck and cervical spine: Significant bilateral cervical hypertonicity and spasticity L>R.

Plan: Stroke alert was called and CT brain without contrast showed no intracranial hemorrhage or acute infarct. PTT, PT, INR, CBC, BMP were unremarkable. Diphenhydramine and metoclopramide were administered without improvement of symptoms. Patient declined morphine, Toradol, and Ativan due to drug allergies or interactions. His headache continued to be refractory to treatment in the ED.

He was treated with OCF in the ED. After 15 minutes of treatment with OCF, the patient's pain decreased from 10/10 to 2/10 and he was discharged home. His headache completely resolved two days after treatment and he remained pain free at one and four month follow up.

Discussion

Osteopathic manipulative medicine (OMM) is an underutilized treatment modality and is especially uncommon in the ED. OMM has a low risk-benefit ratio and should be considered as an adjunctive treatment modality, not only a last resort. This case demonstrates effective integration of osteopathic treatment modalities resulting in improved outcomes and patient satisfaction.

References

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