



2024 INTERVIEW SUMMARY SHEET

SPEAKER**Fred Cohen, MD****TITLE & ORGANIZATION****Assistant Professor of Medicine and Neurology
Mount Sinai Headache and Facial Pain Center
Icahn School of Medicine****TOPIC****Neuromodulation Devices: Proven Drug-Free
Treatment for Migraine**

KEY TAKEAWAYS

- Neuromodulation devices use magnetic or electrical currents to modulate brain activity. They can be an effective and drug-free way to prevent and abort migraine attacks.
- These devices target various nerves involved in migraine, including the trigeminal, occipital, vagus, and peripheral nerves.
- Cefaly, SAVI Dual, and Nerivio have been approved for use for prevention and acute treatment of migraine.
- The gammaCore device has also been approved for the prevention and acute treatment of migraine, as well as for cluster headache and hemicrania continua.
- Relivion MG has been approved for acute treatment of migraine.
- The effectiveness of neuromodulation devices can vary from patient to patient; there is no one device that works best for everyone.
- Medications can be used in conjunction with neuromodulation devices. The devices can also be used at the first sign of a migraine attack to enhance effectiveness.
- Access issues, including high costs and difficulty obtaining insurance coverage, are a significant problem for many patients seeking these devices.

TREATMENTS CITED

Acupressure	Humming
Acupuncture	Implantable devices
Atogepant (Qulipta)	Nerivio
Cefaly	Relivion MG
Deep breathing	Rimegepant (Nurtec ODT)
Eptinezumab (Vyepti)	SAVI Dual
Erenumab (Aimovig)	Sumatriptan
Fremanezumab (Ajovy)	Topiramate (Topamax)
Galcanezumab (Emgality)	Ubrogepant (Ubrovelvy)
gammaCore	Zavegepant (Zavzpret)
Gargling	

QUOTES

"Think of these pain pathways like highways in your head. It is like a racetrack: It goes up and it goes down these neural pathways. Think of [migraine] like a racetrack with no finish line: It's just going, going, going ... These devices will send pulses [and] currents that will modulate these pain pathways to reduce it."

"[Neuromodulation] devices are specifically designed for these treatments, meaning that they're giving specific doses, specific currents in specific areas. I don't recommend patients getting a generic TENS [transcutaneous electrical nerve stimulation] unit ... or electrodes [because] we don't know what's in them."

"There have been some studies, specifically animal studies, that have shown that vagus nerve stimulation has been as effective as taking sumatriptan in inhibiting the trigeminal vascular pathway."

"I have some patients that have the devices; it is a godsend for them that it's helped so much. Others have said that it hasn't."

PRACTICAL STEPS

- Investigate and discuss with your provider each of the devices that might be appropriate for you. Different devices target different nerves involved in migraine and some devices can improve symptoms other than headache pain.
- Start with the low intensity setting when first using a device and gradually increase the intensity as needed — but remember that it should not cause pain.
- Consider neuromodulation devices in particular if you are pregnant or have comorbidities.
- Explore options for insurance coverage and seek assistance from advocacy groups if you encounter difficulty in accessing or paying for a neuromodulation device.