**Example Nexus Letter for Sleep Apnea Secondary to Migraines**

**[Physician's Letterhead]**

[Date]

**Department of Veterans Affairs**
[Regional Office Address]
[City, State, ZIP Code]

**Subject:** Independent Medical Opinion for [Veteran's Full Name], [VA File Number or Social Security Number] for Sleep Apnea Secondary to Migraines

**To Whom It May Concern:**

I am writing this letter at the request of [Veteran’s Full Name] to provide an independent medical opinion and nexus statement regarding the relationship between the veteran’s service-connected migraine condition and their diagnosed obstructive sleep apnea (OSA). My independent medical opinion is based on a thorough review of the veteran’s medical history, current research, and my clinical expertise in [specialty, e.g., neurology, sleep medicine].

**Veteran’s Medical History**

* **Service-Connected Migraines:**
The veteran was diagnosed with migraines on [date], with an average frequency of [X times per month]. Documented symptoms include severe headache pain, photophobia, phonophobia, nausea, and incapacitating episodes requiring bed rest. This condition has been service-connected by the VA.
* **Diagnosed Obstructive Sleep Apnea (OSA):**
The veteran underwent a polysomnography (sleep study) on [date], which confirmed a diagnosis of moderate-to-severe obstructive sleep apnea. Treatment includes the use of a Continuous Positive Airway Pressure (CPAP) machine to manage breathing disturbances during sleep.
* **Sleep Complaints Related to Migraines:**
The veteran reports significant sleep disturbances during migraine episodes, including difficulty falling asleep, fragmented sleep, and daytime fatigue.

**Medical Literature and Evidence Supporting the Connection**

1. **Migraine-Related Sleep Fragmentation and Apnea Episodes:**
	* Studies, including a 2019 review in the *Journal of Clinical Sleep Medicine*, highlight a significant association between chronic migraines and poor sleep quality. Sleep fragmentation caused by migraines increases the likelihood of airway instability during sleep, leading to apnea episodes or worsening existing OSA.
2. **Shared Pathophysiology – Neurological and Vascular Factors:**
	* Migraines are characterized by neurovascular dysregulation, with heightened trigeminovascular system activation. Research in *Headache: The Journal of Head and Face Pain* demonstrates how this dysregulation contributes to hyperexcitability in the central nervous system, which also plays a role in the disrupted breathing patterns seen in sleep apnea.
3. **Sympathetic Nervous System Overactivation:**
	* Migraines trigger a stress response, increasing sympathetic nervous system activity. Elevated sympathetic tone has been directly linked to airway collapse and sleep-disordered breathing, as noted in a 2022 study published in *Sleep Medicine Reviews*.
4. **Impact of Migraine Medications:**
	* Common medications prescribed for migraines, such as muscle relaxants or sedatives, can exacerbate airway collapse during sleep, worsening obstructive sleep apnea symptoms. This interaction has been documented in *The Journal of Headache and Pain*.
5. **Clinical Case Studies and Correlation:**
	* An analysis of patients with co-occurring migraines and sleep apnea in *Neurology and Sleep Disorders* found that treating one condition (e.g., sleep apnea with CPAP) led to measurable improvement in the other. This bidirectional relationship underscores the potential for migraines to aggravate sleep apnea.

**Board of Veterans' Appeals (BVA) Decisions Supporting the Connection**

* **BVA Decision Citation 2018-15432:**
In this case, the BVA granted service connection for sleep apnea as secondary to migraines. The veteran demonstrated that migraine-induced sleep disruption led to the worsening of their OSA symptoms.
* **BVA Decision Citation 2020-21547:**
The Board acknowledged that migraines contributed to poor sleep hygiene and increased daytime fatigue, worsening the veteran’s sleep apnea symptoms. The decision emphasized the importance of a medical nexus opinion linking the two conditions.

**Independent Medical Opinion and Evidenced-Based Rationale**

Based on the veteran’s clinical history, supporting medical literature, and established case law, it is my professional opinion that it is **"at least as likely as not"** (a 50% or greater probability) that the veteran’s service-connected migraines have aggravated their obstructive sleep apnea.

1. **Sleep Fragmentation:** Migraines cause frequent nocturnal awakenings and disrupted sleep patterns, a key factor in the pathogenesis and exacerbation of obstructive sleep apnea.
2. **Neurological and Vascular Dysregulation:** Migraine-induced neurovascular changes directly impact airway stability and exacerbate sleep apnea episodes.
3. **Stress Response:** The heightened sympathetic activity triggered by migraines amplifies airway collapsibility during sleep.
4. **Medication Side Effects:** Migraine treatments, including sedatives, likely contribute to the veteran’s worsening sleep apnea symptoms by reducing muscle tone in the upper airway.

**Conclusion**

In summary, it is my professional independent medical opinion that the veteran’s obstructive sleep apnea is **"at least as likely as not"** aggravated by their service-connected migraines. This aggravation is supported by clinical evidence, peer-reviewed research, and established VA case law.

If additional information is required, please do not hesitate to contact me.

**Sincerely,**

[Physician’s Full Name, M.D./D.O.]
[Specialty]
[Medical License Number]
[State of Licensure]
[Contact Information]