

A 62-year-old female visits the family physician with complaints of right-sided hearing loss, ringing in the right ear (*tinnitus*), numbness over the right half of her face, and dizziness. The physician diagnoses her with an acoustic schwannoma that is occluding her right internal acoustic meatus. The internal acoustic meatus pierces the posterior surface of the petrous part of the temporal bone. **The internal acoustic meatus transmits which two structures?**

- trigeminal nerve (CN V) and facial nerve (CN VII)
- facial nerve (CN VII) and vestibulocochlear nerve (CN VIII)
- vestibulocochlear nerve (CN VIII) and vagus nerve (CN X)
- trigeminal nerve (CN V) and vagus nerve (CN X)