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Spinal Nucleus of V

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Synonyms

[Spinal trigeminal nucleus](#)

Definition

Brainstem nucleus that extends from the lateral pons, through the medulla and into the upper cervical cord. The largest of all cranial nerve nuclei, the spinal nucleus of V is one of the three paired sensory nuclei associated with the trigeminal or fifth cranial nerve. The spinal nucleus of V receives input from the spinal tract of V which

carries information regarding pain, temperature, and crude touch from the face and forehead. In turn, it gives rise to the ventral trigeminothalamic tract which transmits this information to the ventral posterior medial nucleus of the thalamus and eventually to the somatosensory cortex. Brainstem lesions involving this nucleus (or tract) would be expected to result in ipsilateral loss of pain and temperature in the face and/or forehead.

Cross-References

► [Spinal Tract of V](#)

References and Readings

Wilson-Pauwek, L., Akesson, E. J., Stewart, P. A., & Spacey, S. D. (2002). *Cranial nerves in health and disease*. Hamilton: B.C. Decker.