

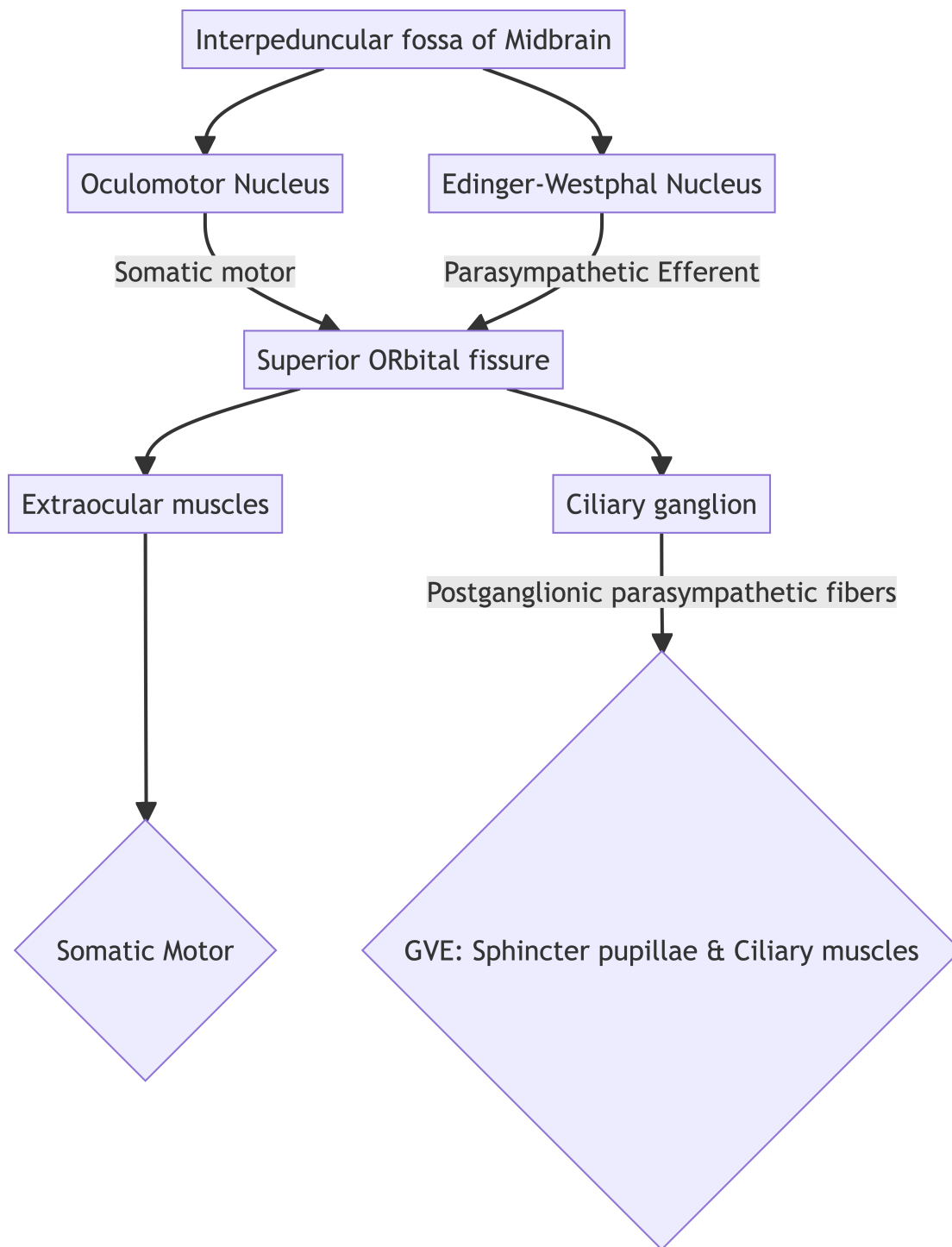
CNIII Oculomotor Nerve

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1 Overview

- CNIII refers to nerve fibers containing somatic motor fibers running to extraocular muscles of the eye as well as parasympathetic efferent fibers running to the muscles in the lens.
- CNIII is myelinated by Schwann cells and is therefore considered part of the PNS.

2 Pathway

- CNIII travels with CN IV and VI through the cavernous sinus¹.
- Next, these three nerves leave the skull through the superior orbital fissure to synapse and innervate the extraocular muscles¹.
- CN III also carries parasympathetics to the pupillary constrictor and to the ciliary muscle of the lens¹.

3 Function

3.1 Somatic motor control of Extraocular muscles

- Superior Recti
- Medial Recti
- Inferior Recti
- Inferior Oblique

3.2 Parasympathetic efferent to lens

1. Blumenfeld H. *Neuroanatomy Through Clinical Cases*. 3rd ed. Oxford university press; 2022.

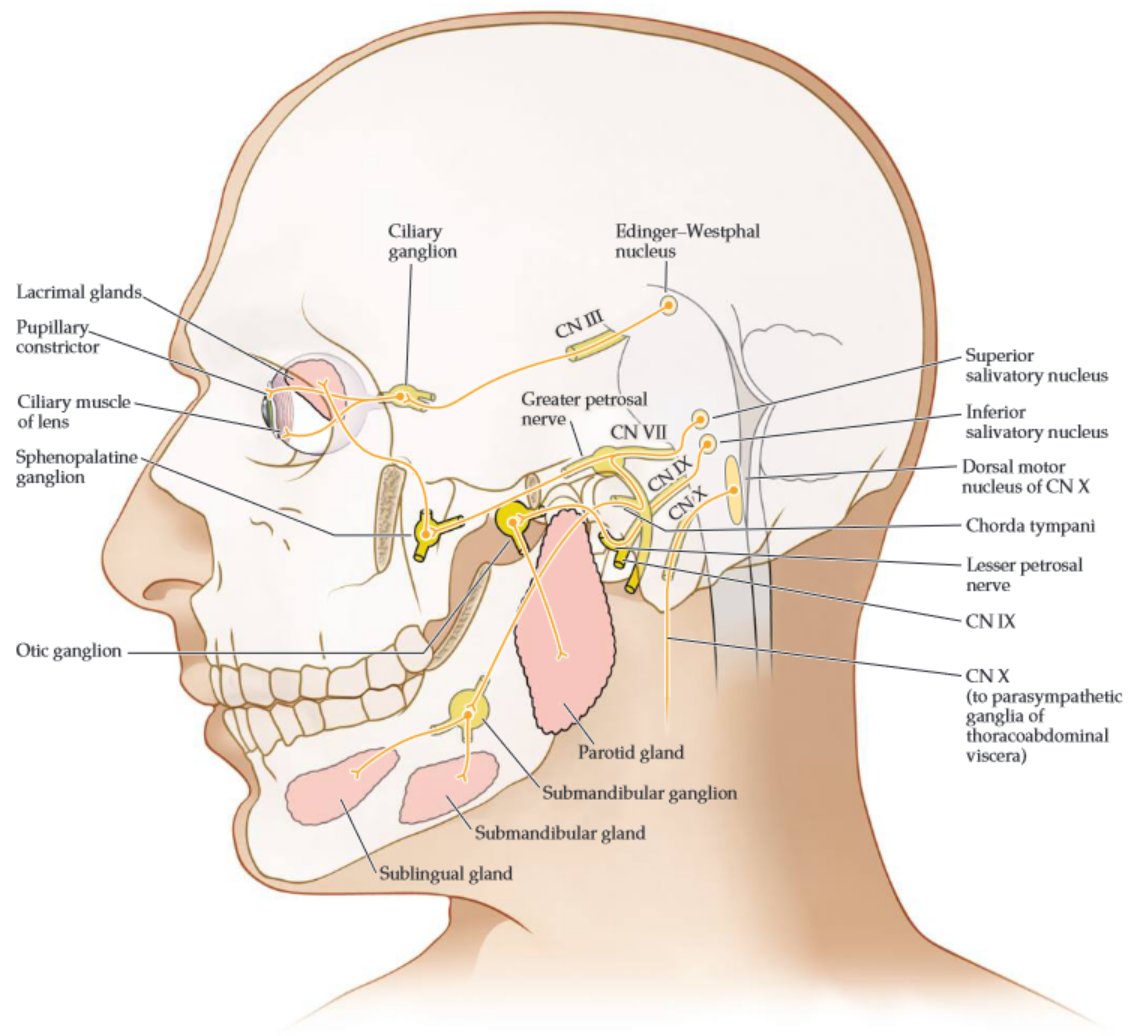


Figure 1: Cranial Nerve Sympathetic Pathways (from Blumenfield Figure 12.6¹)