

Cranial Nerves XI and XII Assessments

Cranial nerves XI & XII are known as the spinal accessory nerve and the hypoglossal nerve, respectively. To assess CN XI, examine the sternocleidomastoid muscles then examine the trapezius muscles. Assessment of the CN XII entails inspection of the tongue and noting lingual speech.



PLAY PICMONIC

Cranial Nerves XI - Spinal Accessory Nerve

[Brainstem Pushing \(11\) Wheelchair with Accessories](#)

Also known as the accessory nerve, this is a motor nerve that is responsible for head-turning and shoulder shrugging.

Examine Sternocleidomastoid Muscles

[Examine Sternum-clavicle-mustard](#)

To examine the Sternocleidomastoid Muscles, have the person turn their head against pressure applied from your hand to one side, then repeat for the contralateral side forcibly to the right against resistance applied against their chin. Next, check the left side the same way. Both sides should be equal. Strokes or peripheral nerve injury may lead to muscle weakness or paralysis.

Examine Trapezius Muscles

[Examine Trapeze-artist](#)

Examination of the trapezius muscle is done by having the person lift their shoulders up while applying downward pressure resistance to them. The strength of the trapezius muscles should be equal bilaterally.

Cranial Nerve XII - Hypoglossal Nerve

[Brainstem with V12-motor and Hippo-glass](#)

CN XII is also known as the hypoglossal nerve. This nerve is a motor nerve responsible for tongue movements such as making noises, swallowing, speaking, and moving substances such as food around in the mouth.

Inspect the Tongue

[Inspect the Tongue](#)

The hypoglossal nerve is assessed by examining the tongue for tremors. Ask the person to push their tongue out. The tongue's movement should be midline. A stroke affecting the hypoglossal nerve will cause the tongue to deviate to the side.

Note Lingual Speech

[Note Linguini Speech](#)

To assess the lingual speech, have the person say words with the letters L, T, D, N. The words should be clear and well-defined. A stroke will affect these sounds.