Cranial Nerves III, IV and VI Assessments

CNs III, IV, and VI are the oculomotor, trochlear, and abducens nerves. Assess P.E.R.R.L.A, and extraocular movements through the six cardinal positions of gaze.

PLAY PICMONIC

Cranial Nerve III - Oculomotor Nerve

Brainstem with (3) Trident and Octopus-motor

Cranial nerve III is called the oculomotor nerve, and is the motor neuron that controls the majority of the eye's movement. It is also responsible for accommodation, eyelid opening, and pupillary constriction.

Cranial Nerve IV - Trochlear Nerve

Brainstem with 4x4s with Truck Pulling Eye

Cranial nerve IV is also called the trochlear nerve. It's a somatic motor neuron that controls the superior oblique muscle, which abducts, depresses and internally rotates the eye.

Cranial Nerve VI - Abducens Nerve

Brainstem training Mr. 6-pack Using Abs to Abduct Eye

Cranial nerve VI controls the lateral rectus muscle. It's also known as the abducens nerve and is classified as a somatic motor nerve. The abducens nerve innervates the lateral rectus muscle, which abducts the eye. Its interneurons feed into the contralateral medial longitudinal fascicles to coordinate the contralateral medial rectus for horizontal eye movement.

Assess Extraocular Movements, P.E.R.R.L.A

Assess-man Eye Muscle Movement and Peals

Check that the person's Pupils are Equal, Round, Reactive to Light and Accommodation; P.E.R.R.L.A. Assess the person's extraocular movements by the cardinal positions of gaze by asking the patient to follow your finger or pen with only their eyes and without turning their head. Starting 12 inches in front of the patient's eyes, draw an "H" to assess all six points of cardinal gaze. The intact lateral gaze of both eyes indicates a functioning CNVI. Intact medial and inferior gaze (toward the nose) indicates an intact CNIV. All other expected ocular movements, including PERRLA, indicate an intact CNIII. Pupils that are unilateral, dilated, and nonreactive can indicate increasing intracranial pressure.

Note Any Nystagmus

Nostradamus

Assess for nystagmus, which is the quick back-and-forth movement of the eyes. If nystagmus is noted, look for characteristics such as pendular movements (equal movement right to left), amplitude (the degree of movement), frequency and plane of movement. Nystagmus occurs with disease of the vestibular system, cerebellum or brain stem. Nystagmus with lateral gaze, assessing CNVI, is sometimes an expected finding.