

Cranial Nerves

Olfactory nerve (1 CN)

Can you smell your coffee or soap?

Optic nerve (2 CN)

Visual acuity

Test each eye separately

Tell patient that you are going to check their eyesight

Ask them to close one eye and test distant vision using Snellen's chart at a distance of 10 feet

Visual fields

Sit directly opposite the patient at the same level with your right eye closed approximately one metre away. Ask the patient to cover left eye with left hand, not to move their head and to say yes when they see your finger. The finger should be equidistance from you and the patient. Bring the finger into the field of vision in a curved not a straight line. Repeat with other eye.

Fundoscopy

Given separately.

Accommodation

Ask the patient to look into the distance and then at the tip of their nose

Oculomotor nerve (3 CN), Trochlear (4CN), Abducent nerve (6CN)

Pupillary light reflex

Ask the patient to look into the distance and explain that you are going to shine a light into their eyes. Bring light from below and side. Observe for direct and consensual light reflex. Repeat with other eye.

Extraocular movements

Tell the patient that you are going to check the movements of their eye muscles. Ask them to follow your finger with their eyes without moving their head and to tell you if they see double. You should again be at a distance of one metre from the patient. Make an H, pausing at the ends of each direction of gaze to observe for nystagmus.

Trigeminal nerve (5 CN)

Consists of 3 sensory and one motor divisions

Light touch

Sensation is tested with cotton wisp, lightly touching (do not drag) both sides of forehead, cheek and chin. Avoid touching the angle of the jaw, which is innervated by upper cervical roots.

Motor

Supplies muscles of mastication. Palpate the temporalis and masseter muscles on each side. Ask the patient to clench their teeth tightly and palpate the muscles again. Ask the patient to open their mouth and then repeat against resistance from your hand under the patient's chin.

Jaw jerk

Place a finger in the midline, over patient's mandible, with patient's mouth slightly open. Tap your finger with a hammer.

Corneal reflex

Normally not checked

Facial nerve (7 CN)

Sensory

Ask the patient if they can taste their food as before

Motor Upper MN

Observe for narrowing of the palpebral fissure or loss of nasolabial fold.

Ask the patient to wrinkle their forehead. Ask the patient to close their eyes tightly and not let you open them.

Motor Lower MN

Smile or show their teeth

Ask them to blow out their cheeks.

Vestibulocochlear nerve (8 CN)

Hearing

Rub fingers close to the patient's ear and ask if they can hear the sound. Gradually move the fingers away and tell the patient to let you know when they can't hear the sound.

Rinne's test

Air conduction is better than bone conduction. Use tuning forks of 256 or 512 hertz frequency.

Glossopharyngeal nerve (9 CN) and Vagus nerve (10 CN)

Ask the patient to open their mouth and see if the uvula is central. Tell them to say "ah" and see if the fauces move.

Accessory nerve (11 CN)

Stand behind the patient and ask them to push their chin against your hand. Palpate sternocleidomastoid muscle while patient is doing this

Ask patient to shrug their shoulders against resistance. Check power by pushing down.

Hypoglossal nerve (12 CN)

Ask the patient to take out their tongue and move it from side to side.

Ask to press their tongue against the cheek and feel the muscle bulk. Repeat on the other side