

Cranial Nerve Exam

1: Olfactory

- Not if doing general screen. Close eyes. Check each nostril patent then test.
- Poor smell common (smoking, allergies, ageing). Also in frontal lobe tumour, trauma, Alzheimer's, Parkinson's, MS, chemotherapy, Kallman's syndrome.

2: Ophthalmic nerve

- Check if they normally wear glasses.
- Acuity (test each eye separately and use pinhole if they've forgotten their glasses).
- Visual fields (red pinhead test good for vague hemianopia)
- Fundoscopy

3, 4 and 6:Oculomotor, Trochlear and Abducens

- Look for ptosis
- Pupils: shape and symmetry, corneal light reflex, swinging light test and accommodation
- Eye movement: draw an H > 45cm away, ask for report of diplopia, watch for one eye lagging or nystagmus. If diplopia found, find field where it is maximal. Hold finger perpendicular to line of movement (easier to follow) and only do test once.
- Cover test: look at target, cover one eye, does other eye move? Shows which is fixing eye.
- May wish to test saccadic movement (overshoot and come back → ipsilateral cerebellar lesion, MLF or contralateral parietal lobe)

5: Trigeminal

- Light touch and pinprick in all 3 divisions on both sides.
- Corneal reflex (early sign of lesion)
- Motor: temporal wasting, jaw deviation and opening in midline (tests pterygoids). Bit stick on each side separately and should not be able to pull out and/or clench jaw and palpate masseters. Jaw jerk only if indicated

7: Facial

- Wrinkle forehead, close eyes tightly, „show your teeth“ (not smile), puff up cheeks.
- Taste anterior 2/3 tongue - not tested routinely

8: Vestibulocochlear

- Whispered voice at arms length, with patient's eyes close and distracting opposite.
- Rinne test and Weber tests. (Otoscopy if hearing is decreased)
- Test of vestibular function not routine unless gait or balance complaint. Romberg test - tests vestibular and position sense.

9 and 10: Glossopharyngeal and Vagus

- Uvula in midline and moves up symmetrically
- Check swallowing and speech (for hoarseness). Say "eeee" to test vocal chord apposition.
- Not done - Gag reflex/pharyngeal sensation. Unilateral absence abnormal, bilateral absence may be normal.

12: Hypoglossal

- Observe in mouth: fasciculation (?motor neuron disease), wasting
- Protrude tongue: deviates to weak side. Move tongue rapidly from side to side or say 'la la la'

11: Accessory

- Observe sternomastoid and trapezius at rest for wasting, fasciculation, or dystonia.
- Shrug shoulders: observe then test strength
- Look sideways, try to return head against resistance (use fist against lateral forehead and feel contralateral side to head turn)
- Always test neck extension if diffuse muscle weakness – if abnormal indicates lesion above C1/C2