Expert in my pocket

NEUROLOGICAL OBSERVATIONS

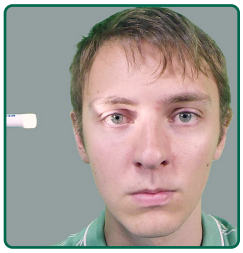
Neurological Observations

❶ Preparing for the procedure

a. Sanitise hands.

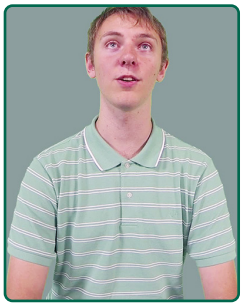
b. Don personal protective equipment as appropriate.

c. Explain the procedure to the patient and seek consent.



❷ Performing the procedure

a. Eye response and pupil reactivity to light. Observe whether the patient opens eyes spontaneously, or only in response to voice or tactile stimulus. Observe the pupils for size, shape, equality and regularity. Use a suitable torch to shine light from the side of the face and across the patient's eye (to stop the patient from focussing on the torch which would constrict the pupils and cause a false finding), and observe for a direct and consensual change in size of the pupils. Compare the reaction of both pupils to the stimulus on each side. Test pupil accommodation: ask the patient to look at a distant object in the room and away from a bright light. Observe for the pupil size (decreasing slightly when focussing on the near object - indicating actions of lens muscles on the lens).



b. Verbal response. Engage patient who appears to be asleep, distracted or have an altered level of consciousness and observe whether their eyes stay open spontaneously. Ask questions to ascertain orientation, such as "Could you tell me where you are? Could you tell me what day of the week, month, and year it is? Could you tell me what I do for a job?"

c. Motor response. If the patient has purposeful movements, ask the patient to squeeze your hands. If no response check central response to pain (for example supraorbital notch pressure or trapezius pinch). Also check bilateral peripheral response to nail bed pressure and record best response.

❸ Documentation

a. Record the response of the pupils to light and the GCS.

Background

Testing the Glasgow Coma Score (GCS) and pupils function form part of a basic neurological screen. Testing pupils for reactivity to light is a combination of testing the sensory function of cranial nerve II and the motor function of cranial nerve III.

The GCS is scored between 15 (best) and 3 (worst). A GCS of 13 or greater correlates with a mild brain injury, a GCS of between 9 and 12 correlates with a moderate injury and 8 or less a severe brain injury.

A GCS is composed of the best response in three parameters: eye response, verbal response and motor response. The order of steps will differ depending on the conscious level of the patient. Assessment of eye opening and motor response may be completed simultaneously.

Best Eye Response
No eye opening (1)
Eye opening to pain (2)
Eye opening to verbal command (3)
Eyes open spontaneously (4)

Best Verbal Response
No verbal response (1)
Incomprehensible sounds (2)
Inappropriate words (3)
Confused (4)
Orientated (5)

Best Motor Response
No motor response (1)
Extension to pain (2)
Flexion to pain (3)
Withdrawal from pain (4)
Localising pain (5)
Obeys Commands (6)

Equipment required

- Penlight torch
- Nitrile gloves
- Face shield
- P2 mask
- Hand sanitiser

References

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