Physical examination

A physical examination, medical examination, or clinical examination (more popularly known as a check-up or medical) is the process by which a medical professional investigates the body of a patient for signs of disease. It generally follows the taking of the medical history — an account of the symptoms as experienced by the patient. Together with the medical history, the physical examination aids in determining the correct diagnosis and devising the treatment plan. This data then becomes part of the medical record.

A Cochrane Collaboration meta-study found that routine annual physicals did not measurably reduce the risk of illness or death, and conversely, could lead to over-diagnosis and over-treatment. The authors concluded that routine physicals were unlikely to do more good than harm.

Imaging is important in the evaluation of patients with degenerative disease and infectious processes. There are numerous conditions that can manifest as low back pain (LBP) or neck pain in a patient, and in many cases, the cause may be multifactorial. Clinical history and physical examination are key components in the evaluation of such patients; however, physical examination has variable sensitivity and specificity. Although studies have demonstrated that uncomplicated acute LBP and/or radiculopathy are self-limited conditions that do not warrant any imaging, neuroimaging can provide clear anatomic delineation of potential causes of the patient's clinical presentation. Various professional organizations have recommendations for imaging of LBP, which generally agree that an imaging study is not indicated for patients with uncomplicated LBP or radiculopathy without a red flag (eg, neurological deficit such as major weakness or numbness in lower extremities, bowel or bladder dysfunction, saddle anesthesia, fever, history of cancer, intravenous drug use, immunosuppression, trauma, or worsening symptoms). Different imaging modalities have a complementary role in the diagnosis of pathologies affecting the spine. Nervous: History

Headache, face pain

Faints, seizures

Dizziness, gait, deafness

Limb sensation, weakness

Tremor, speech

Past medical, surgical history

Family, social, drug history

Systems

Headache

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  Unilateral, photophobia, preceded by flashing lights (classical migraine).
  Photophobia, fever, stiff neck (meningitis).
  Supraorbital, rhinorrhea, lacrimation, in bouts, flushing (cluster
headache).
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  Occiput, neck stiffness (spondylosis).
  Worse in morning, drowsy, vomit (raised ICP).
  Over temporal artery, blurred vision (temporal arteritis).
  Over cheeks or forehead (acute sinusitis).
  Thunderclap then later diffuse (SAH).
  Bilateral, recur often, tightness over an area (chronic tension headache).
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Face pain

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  SOCRATES (trigeminal neuralgia, temperomandibular arteritis, glaucoma,
internal carotid aneurysm, superior orbital fissure syndrome).
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Faints

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  Blackouts, conscious (TIA).
  Sensations before fainting (hypoglycemia):
  • Sweating.
  • Weakness.
  • Confusion.
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Seizures

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  Abrupt loss of consciousness, preceded by aura, incontinent, tongue bitten
(grand mal).
  • Epileptic attacks causes: lights, syncope, tumour, abscess.
  • Complex: unconscious. Simple: conscious.
  In children, idiopathic, no major movements, staring (petit mal).
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Dizziness

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  Deafness, tinnitus (ototoxic drugs).
  50yo, triad of vertigo, tinnitus, deafness (Meniere's).
  Diplopia, atataxia (vertebrobasilar TIAs).
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Gait

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  See Gait.
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Deafness

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  See CN VIII.
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Limb sensation, weakness

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  Pins and needles in hands or feet (peripheral neuropathy):
  • Site: nerve distribution.
  • Timing: worse at night.
  • Alleviating: by dangling arm over bedside.
  Weakness (lesions). See UMNL vs. LMNL Reference.
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Tremor

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  Intention tremor (cerebellar).
  Resting tremor or chorea (Parkinson's).
  Action tremors (BAT:  Benign essential tremor syndrome, Anxiety,
Thyrotoxicosis).
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Speech

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  See Speech.
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Past medical, surgical history

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  Meningitis, encephalitis.
  Spinal injury.
  Epilepsy, convulsions.
  Cerebrovascular dz risk factors.
  Depression [very common in chronic neurological dz]. See Depression.
  Prior operations.
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Family history

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  Similar symptoms in a family member (transmissible or neurotoxin).
  Huntington's.
  Other heritable neurological dz.
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Social history

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  Smoking: ever smoked, how many per day, for how long, type [cigarette,
pipe, chew] (esp. cerebrovascular dz).
  Alcohol (Wernicke-Korsakoff).
  Occupation, exposure to neurotoxins (eg heavy metals).
  Who is with you there at home [important for neurological dz, since
caregiver often needs to help significantly].
  Home: upper floor apartment, stairs, bath (mobility concerns).
  Assess ability to care for self.
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Drug history

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  Anticonvulsants.
  OCP.
  Anti-HTN.
  Steroids.
  Antiplatelets, anticoagulants.
  Anti-parkinsonism drugs.
  Cholinergics, anticholinergics.
  Recreational drugs [very important for neurological].
  Allergies. If allergic to drug, make sure not an allergy, not just a
common side-effect.
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Systems

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Difficulty eating (dysphagia).
Cardiovascular symptoms (cerebrovascular dz).
Back problems (spinal cord impingement).
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Nervous Exam »

Top 10 tips for clinical examinations

Wash your hands at the beginning, and end of every station. There are usually 2 marks for doing this (which can make a difference in a station that's not gone well).

Introduce yourself to the patient and clarify their identity.

Be polite. Thank your patient (they are often real patients giving up their own free time for your education), thank your examiner too.

Be gentle during an examination (remember the patient may have been examined 10 or 20 times before you) It doesn't look good to your examiner if the patient appears in pain.

Look smart. Although there are no points for this it gives the examiner a sense that you are taking the exam seriously.

Tie any long hair up.

Nothing below the elbow. This includes watches. If a station needs a timer this will usually be provided.

If you're unsure of what is being asked of you then ask your examiner for clarification. You won't lose marks for this but will do if you go on to perform the incorrect skill.

If you remember something that you should have done earlier then go back and do this. Again you will not lose marks for having the order wrong but will do if you completely forget an important part e.g. percussion in respiratory examination.

If the examiner has left out equipment for you then use it. E.g. if a station has gloves and an apron laid out then put them on. They aren't there to trick you.