

2. Goniometry values may also be compared with functional activities, such as reaching up above the head and touching the top of the ear at the shoulder level. For example, Parkinson's disease is characterized by hypokinesia and resting tremor, whereas chorea is rapid, jerky movement which is characteristically seen in Huntington's disease.

Examination Techniques

A nervous system physical examination can initially seem like an overwhelming task due to the diversity of symptoms potentially attributable to any given lesion in the central or peripheral nervous system. Nervous system physical examination can be characterized by a high level of complexity, and it often requires a significant emphasis to be placed on the history of presenting complaint and information processing.

Decerebrate or decorticate posturing is an abnormal posture the limbs adopt with spasticity following severe brain injury. However, a systematic approach will give focus and relevance by enabling you to localize a lesion by identifying its functional characteristics.

Dystonia is sustained muscle contraction, frequently causing twisting movements and abnormal postures. Thus, abnormal movements are important in localizing the lesion and may provide clues to the underlying pathology. It is a characteristic hallmark of cerebellar disease and may also be seen with a lesion of the cerebellar pathways, basal ganglia, or the anterior horn cells.

Palpation is an important part of the examination method as, through touch, various lesions and abnormalities can be located, and it helps to alert the physician to abnormalities of muscle tone. Then, if an abnormality is detected, the examination is pursued more intensively and the nature of the abnormality is clarified by delving into the depth.

Spinal cord disease may result in a pattern of muscle weakness usually symmetrical and of the lower limb, so examination of the whole limb is important for accurate diagnosis.

Intention tremor is typified by worsening oscillations as the limb approaches a target (such as the nose or the examiner's finger). It is important to determine if the tremor occurs at rest or is compounded by a specific task and in which limbs it is manifest.

Wasting of individual muscles can be particularly difficult to assess in the limbs with more muscle bulk, such as the thighs or calves. This is where a good knowledge of the anatomy and the function of individual muscle groups is essential in deciding which muscles to test and examine.

Different systems of goniometry are also available, such as the universal goniometer and the fluid goniometer system, but their reliability and preference are disputed at best. This assessment is important in evaluating the patient's progress, diagnosing the cause of movement limitations, and establishing the severity of the problem.

- To establish a baseline functional ability if no previous examination has been performed.
- To evaluate the effectiveness of treatment, for example, if a patient has undergone a decompressive operation for carpal tunnel syndrome.

Tremor can be coarse (regular or irregular oscillations of the muscle) or fine (more rapid, irregular movement). A coarse resting tremor suggests extrapyramidal disease or cerebellar disease.

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