Focal neurologic signs

Focal neurologic signs also known as focal neurological deficits or focal CNS signs are impairments of nerve, spinal cord, or brain function that affect a specific region of the body, e.g. weakness in the left arm, the right leg, paresis, or plegia, identified in neurological examination.

Focal neurological deficits may be caused by a variety of medical conditions such as head trauma, tumors, or stroke; various diseases such as meningitis or encephalitis or as a side effect of certain medications such as those used in anesthesia.

Abducens nerve palsy

Abducens nerve palsy

Cerebellar ataxia

Acute cerebellar ataxia

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see Frontal lobe signs

Parietal lobe signs

Parietal lobe signs usually involve somatic sensation, and may include: impairment of tactile sensation impairment of proprioception, i.e. postural sensation and sensation of passive movement sensory and visual neglect syndromes, i.e. inability to pay attention to things in certain parts of the person's sensory or spatial environment. This can be as extreme as denial of a limb. loss of ability to read, write or calculate (dyslexia, dysgraphia, dyscalculia) loss of ability to find a defined place (geographical agnosia) loss of ability to identify objects based on touch (astereognosia.)

Temporal lobe signs

Temporal lobe signs usually involve auditory sensation and memory, and may include: deafness without damage to the structures of the ear, described as cortical deafness tinnitus, auditory hallucinations loss of ability to comprehend music or language, described as a sensory aphasia (Wernicke's aphasia) amnesia, memory loss (affecting either long- or short-term memory or both) other memory disturbances such as déjà vu complex, multimodal hallucinations complex partial seizures (temporal lobe epilepsy)

Occipital lobe signs

Occipital lobe signs usually involve visual sensation, and may include: total loss of vision (cortical blindness) loss of vision with denial of the loss (Anton's syndrome) loss of vision on one side of the visual field of both eyes (homonymous hemianopsia) visual agnosias, i.e. inability to recognize familiar objects, colors, or faces visual illusions such as micropsia (objects appear smaller) and

macropsia (objects appear larger) visual hallucinations, displaying elementary forms, such as zig-zags and flashes, in one half of the visual field only for each eye. (In contrast, temporal lobe visual hallucinations display complex forms, and fill the entire visual field.)

Limbic Signs

Damage to the Limbic System involves loss or damage to memory, and may include: Loss or confusion of long-term memory prior to focal neuropathy (Retrograde amnesia) Inability to form new memories (Anterograde amnesia) Loss of, or reduced emotions (Apathy). Loss of olfactory functions. Loss of decision making ability.

Cerebellar signs

Cerebellar signs usually involve balance and coordination, and may include: unsteady and clumsy motion of the limbs or torso (ataxia) inability to coordinate fine motor activities (intention tremor), e.g. “past-pointing” (pointing beyond the finger in the finger-nose test) inability to perform rapid alternating movements (dysdiadochokinesia), e.g. inability to rapidly flip the hands involuntary left-right eye movements (nystagmus)

Brainstem signs

Brainstem signs can involve a host of specific sensory and motor abnormalities, depending on which fiber tracts and cranial nerve nuclei are affected.

Spinal cord signs

Spinal cord signs generally involve unilateral paralysis with contralateral loss of pain sensation

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