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Decerebrate posture

Decerebrate posture is an abnormal body posture that involves the arms and legs being held straight out, the toes being pointed downward, and the head and neck being arched backward. The muscles are tightened and held rigidly. This type of posturing usually means there has been severe damage to the brain. People who have this condition should get medical attention right away.

Considerations

A severe injury to the brain is the usual cause of decerebrate posture.

Opisthotonus (a severe muscle spasm of the neck and back) may appear the same as decerebrate posture.

Decerebrate posture can occur on one side, on both sides, or in just the arms. It may alternate with another type of abnormal posture called decorticate posture. A person can also have decorticate posture on one side of the body and decerebrate posture on the other side.

Causes

Causes of decerebrate posture include:

- Bleeding in the brain from any cause
- Brain stem tumor
- Stroke
- Brain problem due to illicit drugs, poisoning, or infection
- Traumatic brain injury
- Brain problem due to liver failure
- Increased pressure in the brain from any cause
- Brain tumor
- Infections, such as meningitis
- Reye syndrome (sudden brain damage and liver function problems that affects children)
- Brain injury from lack of oxygen

Home Care

Conditions related to decerebrate posture need to be treated right away in a hospital.

When to Contact a Medical Professional

Abnormal posturing of any kind usually occurs with a reduced level of alertness. Anyone who has an abnormal posture should be examined right away by a health care provider.

What to Expect at Your Office Visit

The person will need emergency treatment right away. This includes breathing assistance and placement of a breathing tube. The person will be admitted to intensive care.

Once the person is stable, the provider will obtain a complete medical history from family members or friends and do a more complete physical examination. This will include a careful examination of the brain and nervous system.

Family members will be asked questions about the person's medical history, including:

- When did the symptoms start?
- Is there a pattern to the episodes?
- Is the body posturing always the same?
- Is there any history of a head injury or other condition?
- What other symptoms came before or with the abnormal posturing?

Tests may include:

- Blood and urine tests to check blood counts, screen for drugs and toxic substances, and measure body chemicals and minerals
- Cerebral angiography (dye and x-ray study of blood vessels in the brain)
- CT or MRI of the head
- Electroencephalogram (EEG) -- brain wave testing
- Intracranial pressure (ICP) monitoring
- Lumbar puncture to collect cerebrospinal fluid

The outlook depends on the cause. There may be brain and nervous system injury and permanent brain damage, which can lead to:

- Death
- Coma
- Inability to communicate
- Paralysis
- Seizures

Alternative Names

Opisthotonus - decerebrate posture; Abnormal posturing - decerebrate posture; Traumatic brain injury - decerebrate posture; Decorticate posture - decerebrate posture

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Updated by: Joseph V. Campellone, MD, Department of Neurology, Cooper Medical School of Rowan University, Camden, NJ. Review provided by VeriMed Healthcare Network. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

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