Hypertonia: Rigidity in Cerebral Palsy

Cerebral Palsy: These two words, when presented to you by your infant or child’s physician, are scary enough, and so when the doctor adds hypertonia, your concern meshes with confusion, leaving you befuddled and feeling uninformed.

Hypertonic cerebral palsy? What is it? What does it mean? Most importantly, how will it affect your child?

CEREBRAL PALSY
To understand hypertonia, you must first understand cerebral palsy. A neurological disorder commonly diagnosed in infancy or childhood, (typically no later than age 3) cerebral palsy is a result of abnormalities in the part of the brain that controls muscle movement. As a result, individuals with cerebral palsy have difficulty with body control and overall muscle coordination. Commonly, cerebral palsy is detected as a result of the child’s inability to control his/her muscles during voluntary activity or as a result of the child’s atypically stiffened muscles and exaggerated reflexes.

Once diagnosed, your child will receive treatment for cerebral palsy in the form of physical, occupational and speech therapy, as well as, possibly, medications or surgery, depending on your child’s health and the clinical opinion of his/her health care team. The exact plan of care will also depend on the type of neurological disorder your child has, as the term “cerebral palsy” encompasses a number of disorders, hypertonia being one of them. Many children with cerebral palsy see gains in their abilities and continue on to lead happy, successful lives.

HYPERTONIA
Hypertonia or hypertonic cerebral palsy refers to a neurological disorder in which your child has increased muscle tone and appears stiff or rigid. The muscle tension in your child’s body cannot be relieved through stretching and can sometimes lead to an inability to move joints. In worst-case scenarios and/or untreated individuals, loss of function and deformity may occur. While hypertonia, when diagnosed in a young child is generally treated with rehabilitative therapy and, if helpful and prescribed by a physician, medications, such as baclofen, diazepam, and clonazepam. The rehabilitative therapy typically consists of range of motion exercises, passive and active stretching, and further occupational therapy. To fully understand your child’s therapy, you should speak with his/her occupational therapist.

TREATMENT
As with most forms of cerebral palsy, hypertonia is treated with rehabilitative therapy. Hyper-tonia refers to a form of cerebral palsy, it can also be the result of injury, disease or a prior condition.

There are several types of hypertonia:

Spastic hypertonia – An individual with spastic hypertonia will experience frequent and uncontrol- lable muscle spasms. Your child may experience shock contractions of muscle groups, involuntary stiffening or straightening out of muscles, and abnormal muscle tone.

Dystonic hypertonia – Dystonic hypertonia is most easily noted when working with a therapist. The therapist will gently stretch an inactive, contracted muscle (this is called passive stretching) at a slow pace to ease the tension, but the muscle will return to a fixed, involuntary posture immediately following the stretch.

Rigidity – Rigidity is defined as the involuntary straightening out of muscles, accompanied by abnormal muscle tone. An individual experiencing rigidity will not be able to stretch to relieve the tension.

To fully understand your child’s therapy, you should speak with his/her occupational therapist and take an active part in your child’s care in whatever manner possible.

PROGNOSIS
Your child’s prognosis will depend on the severity of his/her diagnosis, as well as the quality of treatment received. Hypertonia is potentially a painful disorder and can impair quality of life. However, each case is individual, as each child is individual. Stay informed, stay connected, and stay positive.

Information for this patient handout was gathered from:


NOTES:

DISCLAIMER: Your doctor or therapist has given you this patient handout to further explain or remind you about an issue related to your health. This handout is a general guide only. If you have specific questions, discuss them with your doctor or therapist.