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The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Spastic cerebral palsy occurs when brain damage or abnormal development affects the areas of the brain responsible for controlling muscle movement. Cerebral palsy is the most common motor disability in childhood. It leads to muscle stiffness, tightness, and jerky, uncontrolled movements. These symptoms can impact a child's ability to move smoothly and perform everyday tasks, like walking or picking up objects. Some children may experience stiffness in just one arm or leg, while others may have difficulty moving multiple parts of their body. In severe cases, it can also impact speech, swallowing, and fine motor skills. CP is typically diagnosed in early childhood as children begin to miss important developmental milestones. In many cases, spastic CP is caused by brain injury during pregnancy, birth, or shortly after birth. Premature birth, a lack of oxygen to the brain, and infections are common risk factors. If your child's spastic cerebral palsy was caused by a preventable birth injury, you may be eligible for financial support to help with the cost of treatment and other needs. Cerebral Palsy Guide works with a network of top birth injury lawyers across the country. Our legal partners have recovered over $1 billion for families affected by birth injuries, like spastic cerebral palsy. We may be able to help your family, too. Get a free case review right now to see if you could be eligible for financial compensation. Types of spastic cerebral palsy Spastic cerebral palsy can be classified into 3 main subtypes based on the parts of the body that are affected by muscle stiffness and movement problems. Learn more about the types of spastic cerebral palsy below. This type of CP primarily affects the legs, with the arms being less commonly impacted. Children with spastic diplegia cerebral palsy often experience tightness in the hip and leg muscles. The tightness can lead to a condition known as "scissoring," which is when the legs pull together and cross at the knees. This makes walking difficult, and children may need assistive devices like leg braces or a walker. Although the legs are most affected, some children may have mild stiffness in the arms or face as well. Intelligence and language skills are typically normal for children with cerebral palsy spastic diplegia. This subtype affects one side of the body, usually involving the arms more than the legs. The affected arm may appear more rigid and smaller compared to the other arm. In severe cases, the child may experience difficulty with fine motor skills, like gripping objects or using their hand. Walking may be delayed, and children may walk on tiptoe. Some children with spastic hemiplegia may also develop scoliosis (curvature of the spine) as they grow. Despite the movement challenges, intelligence is generally unaffected in children with spastic hemiplegia. Cerebral palsy spastic quadriplegia is the most severe form of the subtypes and affects all four limbs, as well as the trunk and face. Spastic quadriplegic cerebral palsy symptoms include severe stiffness in the muscles, especially in the arms and legs, which can limit mobility. Many children with spastic quadriplegia have difficulty speaking, and some may experience seizures. Cognitive development can also be affected, and children may experience moderate to severe intellectual disabilities. Walking is often not possible for children with spastic quadriplegia, and they may rely on wheelchairs or other assistive devices for mobility. If you have questions about your child's condition, our registered nurses are here to help. Connect with one of our nurses right now — at no cost to you. Causes of spastic CP Cerebral palsy is a broad term for developmental movement disorders caused by brain injury or abnormal brain development. Each type of cerebral palsy results from damage to specific parts of the brain. Spastic cerebral palsy occurs when the motor cortex and pyramidal tracts of the brain are damaged. The motor cortex is responsible for controlling voluntary muscle movements, and the pyramidal tracts act as pathways that send signals from the motor cortex to the spinal cord. Damage to the motor cortex The motor cortex is located in the cerebral cortex, the largest part of the brain. It contains areas responsible for directing voluntary movements. Brain damage to the motor cortex disrupts the ability to control movements, causing them to become stiff, jerky, or "spastic." This results in the characteristic muscle stiffness and movement difficulties seen in individuals with spastic CP. Damage to the pyramidal tracts The pyramidal tracts are pathways that transmit movement signals from the motor cortex to the spinal cord. If the pyramidal tracts are damaged, the brain cannot properly communicate with the spinal cord, which impairs motor control. The spinal cord, along with the brain and brainstem, makes up the central nervous system. This system is essential for functions like movement, touch, and sight. Damage to the pyramidal tracts interferes with these processes, causing the motor control issues observed in spastic cerebral palsy. Risk factors of spastic cerebral palsy Certain cerebral palsy risk factors can increase the odds of a child developing spastic CP. Although the exact cause of brain damage is not always known, some complications are more commonly linked to the condition. Here are 5 known risk factors for spastic cerebral palsy: Premature birth: Babies born before 37 weeks are more likely to experience brain injuries that may lead to cerebral palsy, especially if born very early. Low birth weight: Infants weighing less than 5 pounds at birth have a higher risk, particularly those born with extremely low birth weight. Pregnancy complications: Infections, poor maternal health, or problems with the placenta can disrupt normal brain development. Lack of oxygen during delivery: Difficult or prolonged labor, umbilical cord problems, or blocked airways can limit oxygen to the baby's brain during birth. Infections or head injuries after birth: Conditions like meningitis (brain infection) or trauma in the first months or years of life can damage the parts of the brain that control movement. Health care providers are responsible for recognizing and managing these risk factors before, during, and after birth. If they fail to do so, it could mean that medical malpractice is involved. By closely monitoring high-risk pregnancies, responding quickly to complications, and treating infections early, doctors may be able to prevent the brain injuries that lead to spastic cerebral palsy. When medical professionals fail to manage these risks, the results can be catastrophic. If you believe your child's spastic cerebral palsy could have been prevented, your family may be eligible for financial compensation. Get a free case review right now to see if you may qualify. Signs and symptoms of spastic cerebral palsy Spastic cerebral palsy symptoms are different for every child. The variations in CP symptoms depend on the severity of the child's brain injury and any co-occurring disorders that may be present. Some common signs of spastic cerebral palsy are: Abnormal reflexes Contractures (permanently shortened muscles or tendons) Crossed knees Exaggerated movements Joints don't fully extend Limited mobility Stiff, tight muscles (hypertonia) on one or both sides of the body Unusual gait (manner of walking) Walking on tiptoes Co-occurring conditions may also arise, such as hearing and vision impairment. These are not caused by cerebral palsy itself but by the same brain damage or injury that led to the condition. Signs of cerebral palsy can be hard to recognize in early childhood. Symptoms often don't appear until a child starts missing developmental milestones. Jerky reflexes are common in toddlerhood, and a full diagnosis may not be made until age 5, when delays become more noticeable. Diagnosing spastic cerebral palsy Spastic cerebral palsy is usually diagnosed in early childhood, though signs may be present as early as infancy. Diagnosis often begins when parents or doctors notice developmental delays, such as difficulty with muscle control, stiff movements, or trouble reaching milestones like crawling or walking. There is no single test for diagnosing spastic cerebral palsy. Instead, health care providers use a combination of physical exams, developmental screenings, and imaging tests to assess a child's muscle tone, reflexes, coordination, and motor skills. Common tools and evaluations used to diagnose cerebral palsy include: Blood tests or metabolic screenings to rule out other conditions with similar symptoms Developmental monitoring and screening to track physical and motor milestones Imaging tests, like an MRI or CT scan, to look for signs of brain damage Neurological exams to check muscle tone, strength, posture, and reflexes Spastic cerebral palsy is not a progressive condition, but it may take time to reach a diagnosis, especially if symptoms are mild. In some cases, it can take months or years of observation before a clear diagnosis is made. If you think your child may be showing signs of cerebral palsy, connect with one of our nurses for free. They're here to listen to your story and help you figure out what to do next. Treatment for spastic cerebral palsy Spastic cerebral palsy treatment options vary with each case. The severity of symptoms, the location of movement problems, and any secondary conditions are the biggest factors in developing a treatment plan. However, there are 5 main routes of treatment for CP: medication, surgery, and physical, occupational, and speech therapy. The first type of treatment plan recommended for children with spastic CP is typically physical therapy. The goal of physical therapy is to provide as much independence to the child as possible. This treatment is centered on flexibility exercises and stretching out stiff muscles. Physical therapists will typically use daily range-of-motion (ROM) and stretching exercises to improve the mobility of joints and soft tissues. They often use age-appropriate toys and games to make the therapy enjoyable for the child. This type of therapy can help improve overall motor function and prevent any future complications. Another form of therapy used to treat children with spastic CP is occupational therapy. The goal of occupational therapy is to improve a child's ability to perform daily tasks and activities independently at home, school, and work. Therapists perform exercises that target certain muscles in the wrist, forearm, thumb, and upper body. This treatment is beneficial for spastic CP because it focuses on improving motor control, bilateral coordination, and muscle weakness. Occupational therapists can also assess the need for various assistive devices, such as adaptive scissors or writing utensils. Cerebral palsy speech therapy is used to improve oral movements in children with spastic CP. The objective of speech therapy is to strengthen the muscles used for speech, which helps with articulation and coordination. Some children with this type of CP may experience drooling or difficulty swallowing or speaking. Caregivers can perform exercises that incorporate assistive communication devices, which can help improve motor and cognitive abilities, as well as confidence. Speech therapy provides the tools for children with spastic CP to clearly communicate their thoughts and socialize with others. This form of therapy can also help make chewing, breathing, and swallowing easier, allowing for improved growth and development. Cerebral palsy medications, like benzodiazepines, are taken orally to relieve muscle stiffness and improve movement throughout the body. There are also medications that can treat muscle stiffness in specific parts of the body. For targeted relief, botulinum toxin injections (such as Botox®) may be used to temporarily relax specific muscle groups. This approach can be especially helpful for children with spasticity in localized areas, such as the legs, arms, or jaw. For a child with spastic CP that also experiences seizures, doctors often prescribe medications that can control the frequency of these episodes. Similarly, medications such as diazepam (Valium®) can be used to relax muscles. This is particularly helpful in treating spasticity in the lower legs. The goal is to find cerebral palsy medications that work well with the fewest side effects. Cerebral palsy surgery may be needed for some children with spastic CP to improve mobility, relieve pain, or prevent long-term joint issues. These are 3 common surgical procedures for cerebral palsy: Orthopedic surgery, such as SEMLS (single-event multilevel surgery), corrects several muscle or bone problems in one surgical session. This may include tendon lengthening, muscle release, or bone realignment to help with walking and posture. Selective dorsal rhizotomy (SDR) is a neurosurgical procedure that reduces spasticity by cutting overactive nerve fibers in the spinal cord. Intrathecal baclofen pump implantation delivers muscle relaxant directly to the spinal cord to manage severe stiffness. These procedures can be costly when combined with hospital stays, recovery, and long-term rehabilitation. If spastic cerebral palsy was caused by medical negligence, lawsuit compensation may help cover surgery and other ongoing care needs. Get a free case review right now to see if you may be eligible. Long-term impact of spastic CP The long-term effects (prognosis) of spastic cerebral palsy can vary widely depending on the severity of the condition and the body areas affected. While some children may grow up with only mild movement challenges, others may face more complex, lifelong disabilities that require ongoing care. Muscle stiffness and mobility issues often persist into adulthood. This can lead to joint problems, pain, and difficulty with everyday tasks like walking, dressing, or eating. Children with more severe spastic CP may also experience: Challenges with vision, hearing, or feeding Delays in learning or intellectual disabilities Epilepsy (seizures) that require medication Speech and communication difficulties Many individuals with spastic CP need assistive devices like braces, walkers, or wheelchairs. Long-term care may involve physical therapy, medication, and regular medical appointments. Although spastic CP is not a progressive condition — meaning it doesn't worsen over time — the physical stress on the body can increase. Early intervention and consistent support can help improve quality of life and promote greater independence as children grow. Get help for spastic cerebral palsy Children with spastic cerebral palsy may face a wide range of challenges, including muscle stiffness, jerky movements, and delayed motor skills. These symptoms vary based on the type of spastic CP and the extent of brain injury involved. Tracking your child's development is key. If your child struggles with movement or misses key milestones, talk to a doctor as soon as possible. With early intervention, many children with spastic cerebral palsy can improve their mobility and gain more independence. For many families, a diagnosis brings hard questions — especially about what caused their child's condition. If a medical mistake led to your child's brain injury, taking legal action may help your family secure the financial support needed for surgery, therapy, and long-term care. A cerebral palsy lawyer can review your case and help determine if your child's spastic CP was preventable. The birth injury attorneys in our network have secured over $1 billion for families like yours. We may be able to help your family, too. Call us right now at (855) 220-1101, or get a free case review to find out if you could be eligible for financial compensation. Cerebral Palsy poses unique challenges for children, with muscle spasms being a common source of pain and discomfort. Understanding the impact of cerebral palsy on muscle tone and coordination is crucial for parents navigating the complexities of their child's condition. Dear parents, let us explore the causes of muscle spasms in cerebral palsy, their consequences, and effective strategies for managing and improving the quality of life for affected children. Understanding Cerebral Palsy and Muscle Spasms Cerebral Palsy, a group of neurological disorders, disrupts movement, muscle tone, and coordination due to brain damage or abnormalities during development. Muscle spasms, a prevalent consequence, result in overly toned muscles that contract involuntarily, causing pain and hindering normal movement. These spasms vary in severity, impacting different muscles and leading to challenges in daily activities. Causes and Consequences of Muscle Spasms Causes of Muscle Spasms The causes of muscle spasms in cerebral palsy are rooted in the damage or abnormal development of the brain, impacting the communication between the brain and muscles. This disruption leads to the overstimulation of muscles, resulting in involuntary contractions. Consequences of Muscle Spasms Muscle spasms in children with cerebral palsy contribute to chronic pain, restricting their ability to engage in daily activities. Simple tasks like dressing, eating, or playing become painful, affecting their overall quality of life. Additionally, the psychological impact of persistent pain can lead to emotional challenges, including depression, anxiety, and frustration. Managing Muscle Spasms in Children with Cerebral Palsy Regular Physical Therapy Despite potential initial discomfort, regular physical therapy is absolutely vital for improving range of motion, joint alignment, and natural movement. Parents, do accompany your little ones to sessions, and provide support and comfort during exercises. Proper Bed Positioning Experiment with different bed positions to find the most comfortable one for your child. Invest in special equipment if necessary to ensure proper positioning, promoting better sleep and minimizing pain. Mental Health Support Chronic pain can take a toll on your little one's mental health. Engaging in non-physically exerting activities together, such as listening to music or watching movies, can provide relief. A psychological counselor can help children cope with anxiety, frustration, or depression resulting from their condition. Encouraging Activity Despite physical limitations, encouraging your child to stay active is essential. Activities tailored to their abilities, such as walking and gentle movement exercises, contribute to overall health and may even reduce the frequency of muscle spasms. Monitoring Signs of Pain As a parent, you should stay attuned to signs of pain. Observing changes in facial expression, body language, or verbal cues helps identify when your child is experiencing discomfort. Open communication about their pain points can help receive prompt and effective treatment and care. Medications and Treatments Depending on the severity of muscle spasms, your child's doctors and therapists may prescribe medications to alleviate pain and reduce spasticity. Botulinum toxin injections, baclofen pumps, and oral medications are common treatment options, and their efficacy should be closely monitored. Note: Please do not treat this blog as a prescription. Before starting your child on any medication, it is important to consult your doctor. Nutritional Considerations A well-balanced diet, rich in nutrients, can contribute to overall health and well-being. And for little children, nutrition is key to growth and development. Adequate hydration and nutrition support muscle function and may indirectly influence the frequency and intensity of muscle spasms. Assistive Devices and Orthotics Utilizing assistive devices, such as braces or splints, can help maintain proper joint alignment and alleviate muscle spasms. Customized orthotics provide additional support and promote more comfortable movement. Hydrotherapy and Massage Hydrotherapy, involving exercises in a warm water pool, can provide therapeutic benefits by reducing muscle tension. Massage therapy, performed by a trained professional, may also help relax muscles and alleviate pain associated with spasms. Parental Education and Advocacy Empowering parents with knowledge about cerebral palsy and muscle spasms is crucial. Understanding the condition, its potential challenges, and available resources allows parents to advocate effectively for their child's needs within the healthcare system and educational institutions. Read 7 Tips for Parents of Children with Cerebral Palsy here. Watching a child with cerebral palsy endure muscle spasms can be challenging for parents. However, with a collaborative approach involving a healthcare team, patience, and love, the impact of muscle spasms can be alleviated. While a cure may not be immediate, effective cerebral palsy treatment, including targeted therapies and supportive measures, can significantly reduce pain and enhance the overall quality of life for affected children. FAQs Does cerebral palsy cause muscle spasms? Yes, cerebral palsy can cause muscle spasms. The neurological damage or abnormalities in the brain that characterize cerebral palsy disrupt the communication between the brain and muscles, leading to overstimulated muscles and involuntary contractions. These contractions are known as spasms. How do you treat muscle tightness in cerebral palsy? Muscle tightness in cerebral palsy is typically treated with a combination of physical therapy, medications, and orthotic devices. Read more about physical therapy for cerebral palsy here. What are spastic muscles in CP? Spastic muscles in cerebral palsy are characterized by increased muscle tone and stiffness.Heightened muscle tone is caused by abnormal signals from the brain to the muscles, leading to involuntary muscle contractions. Spasticity can impact various muscle groups, affecting movement, coordination, and overall motor function. What is the difference between spasticity and spasms? Spasticity and spasms are similar, yet distinct phenomena. Spasticity (heightened muscle tone) causes stiffness and resistance to movement. Spasms are sudden and involuntary muscle contractions. Spasticity is a continuous state of heightened muscle tone. Spasms are intermittent and may be triggered by various stimuli. Is spastic cerebral palsy curable? Specific treatment and management strategies for spastic cerebral palsy aim to manage symptoms and improve quality of life. Interventions include physical therapy, medications, orthotic devices, and, in some cases, surgical procedures. Early and ongoing interventions contribute to improved quality of life for individuals with spastic cerebral palsy. Pain in Cerebral Palsy Constant or recurring pain is a very common physical concern of individuals with cerebral palsy (CP), often beginning in childhood but becoming more intense and frequent over the lifespan. Here are some facts about pain in CP and measures that can be taken to alleviate this chronic problem. An adult with cerebral palsy may have additional health considerations to keep in mind and discuss with healthcare providers. The most frequent cause of chronic pain in people with CP is the absence of a correct clinical diagnosis. Common sources of pain, such as migraine headaches, constipation, or gynecological disorders, can be erroneously attributed to CP, disregarded, tolerated, or allowed to persist without proper evaluation and treatment. Uncommon conditions causing pain, such as autoimmune disorders, tumors, or infections (e.g. Lyme Disease) may not be considered in people with CP. Intense or prolonged muscle contractions, as occur in the spastic form of CP, can be painful, just as with a short-lived muscle spasm (charley horse). The excessive, repetitive, and atypical strain that spastic, stiff, or dystonic muscles place on joints leads to joint surface wear with resultant inflammation (arthritis) and exposed pain fibers. No specific source of pain may be evident, but the pain nerves themselves are dysfunctional (this is called neuropathic pain). STEP 1 Ongoing care by a primary care doctor (pediatrician, family physician, internist, and/or gynecologist) who can evaluate and manage common causes of pain and promote optimal general health, nutrition, and fitness. STEP 2 Evaluation by a CP specialist, such as a developmental pediatrician, neurologist, or physical medicine and rehabilitation specialist, who can determine whether pain is likely related to the CP or has another unrelated cause. A referral may be made for investigation of uncommon conditions. STEP 3 Musculoskeletal evaluation by a CP expert team in orthopedics, physical medicine and rehabilitation, and physical therapy. This team will determine what musculoskeletal pain preventive or treatment approaches are most effective. Download Pain Fact Sheet Here! Resources How Do I Select a Primary Care Provider? It is important to find a Primary Care Provider who understands you and your unique needs. While not every provider will have experience with Cerebral Palsy, there are many who do and/or have experience with patients who have physical disabilities. Importantly, you will want to be comfortable that your doctor will listen to you and your specific needs, as well as have the qualifications and knowledge you want. Depending on your healthcare insurance plan, there may be a variety of resources to help you select a primary care physician in your area. If you have a mobility challenge, it's important to remember that the accessibility of the office and the exam room will be important to you and you want to ask about that before making an appointment. More in Pain February 28, 2023 January 25, 2023 March 2, 2022 More in Understanding Your Brain & Body May 14, 2025 February 28, 2025 February 28, 2025 As medical care advances, there is a growing number of adult patients with cerebral palsy. The spastic form is characterized by muscle hypertonicity, hyperreflexia, and spasticity, which are associated with worse quality of life, poor functionality, and pain. This literature review attempts to explore the existing treatments for spasticity in cerebral palsy to provide insight into potential treatments in the adult population. The types of treatments are broadly categorized into physical therapy, pharmacologic treatments, botulinum toxin, surgical treatments, and alternative options. Search by name, specialty, location and more. Find a doctor Find any of our 300+ locations. Get directions Get the in person or virtual care you need. Schedule now We don't just care for your health conditions. We care about you. That means our providers take the time to listen to what's important to you before recommending next steps. Cleveland Clinic is recognized in the U.S. and throughout the world for its expertise and care. You'll get care from board-certified and fellowship trained experts who work together to create a treatment plan just for you. Only the highest standards ensure excellent outcomes. We're focused on today — and tomorrow. Our focus on research and offering the latest options means you can find a wide range of clinical trials and other care that you can't find elsewhere. Explore a curated collection of helpful resources and tools for medical professionals Whether you're just graduating from nursing school or have years of experience, you can build an exceptional career in nursing at Cleveland Clinic. As one of the nation's — and the world's — leading academic medical centers, you can grow in a setting where you'll make a difference. Find your career at Cleveland Clinic. We welcome the opportunity to partner with you in caring for your patients. Our dedicated Referring Physician team is available from 7 a.m. to 7 p.m. EST every day for you and your patients. View our full list of resources for medical professionals, including our Alumni Association, DrConnect, and MyPractice. Muscle spasms (also called muscle cramps) occur when your muscle involuntarily and forcibly contracts uncontrollably and can't relax. Muscle spasms are normal and quite common. They can involve part or all of a muscle or several muscles in a group. You can get muscle spasms anywhere in your body. Some of the most common types include:Back spasms.Arm spasms.Leg cramps and charley horses.Neck spasms.Chest cramps.Abdomen cramps.Ribcage spasms.Who gets muscle spasms?Muscle spasms can happen to anyone at any time. They can occur when you walk, sit, exercise or sleep. Some people are prone to muscle spasms and get them regularly with any type of physical exertion.People who are most likely to get muscle spasms include:Athletes.Infants.Pregnant women.People over the age of 65.People who have obesity.Are muscle spasms (muscle cramps) serious?Most of the time, muscle spasms aren't something to worry about. But in some cases, muscle cramps can indicate an underlying neurological condition. These conditions affect your brain — your brain helps your muscles move. When involuntary muscle movements result from a neurological condition, it's called dystonia.If you have chronic muscle cramps, along with other symptoms like pain, muscle weakness or poor coordination, schedule an appointment with a healthcare provider. They can help determine if you have an underlying neurological issue. Fact Checked The stiffness, rigidity, and spasms that many people with cerebral palsy experience are disruptive, uncomfortable, and even painful, and interfere with swallowing and breathing. Muscle relaxants for cerebral palsy can help relieve these symptoms. Medication use is just one line of treatment for CP, used along with surgery, therapies, and other interventions. How Muscles Are Affected By Cerebral Palsy Cerebral palsy is a disorder of movement and muscles. It is related to nerve and brain damage. When these parts of the body are damaged, it affects the muscles and, therefore, how a person moves. The severity of this effect varies by individual, with some unable to walk while others struggle with balance. The most common type of CP is spastic, which means that muscle tone is increased compared to someone without the condition. The increased tone makes the muscles stiff and rigid, and as a result, movements are spastic. The spasms may affect one whole side of the body, mainly the legs, or in severe cases, all parts of the body, including the face and throat. Less common types of CP affect balance, control of movements, and even the ability to swallow or talk. Sometimes, an individual's muscle tone can vary from too loose to too tight. This is called dyskinetic CP. Other patients with the condition have varying symptoms that can't be categorized as one type or another. Nearly all CP patients experience rigid and spastic muscles at least some of the time. What Are the Complications of Spastic Muscles? Controlling spasms and relaxing rigid muscles is an essential part of the treatment for CP. Having overly toned muscles resulting in spasms and rigidity is uncomfortable and can even be very painful. Spasms can interfere with other types of treatment, like physical therapy, and can prevent a person from being able to sleep at night. What Are Muscle Relaxants? One strategy for treating spastic muscles and tight muscles is to use medications. Muscle relaxants are drugs that decrease muscle tone by acting on the central nervous system. The result is less stiffness and rigidity and smoother, less spastic movements of muscles.[1] Muscle relaxants may also cause side effects, which may bother some people more than others. Doctors can try different types of muscle relaxants if the side effects are too uncomfortable. They might also recommend using them only when severe spasms interfere with sleep and other important functions. Sedation is the main side effect of most types of muscle relaxants. In addition to relaxing muscles, they tend to relax the brain. Operating machinery while on these drugs is discouraged. They may also cause skin rashes, nausea, and weakness. What Muscle Relaxants Are Used for Cerebral Palsy? Muscle relaxants include antispasmodics and antispasmodics. Antispasmodics are used to treat cerebral palsy. These are some of the common antispastic muscle relaxants doctors may prescribe for patients with cerebral palsy. Baclofen Baclofen is a muscle relaxant used in children and adults with CP. Brand names for this drug include Gablofen and Lioresal. It is thought to reduce spasticity by acting on the spinal cord nerves.[2] It can be dosed orally or injected directly into the spinal column. The latter method is newer and delivers the medication directly to the location where it is needed. A small device implanted under the skin delivers baclofen directly to the spinal fluid. Baclofen can cause fatigue, weakness, dizziness, nausea, and sedation, and may also elevate liver enzymes. Dantrolene Dantrolene, sold under the brand names Dantrium and Revonto, acts as a muscle relaxant by interfering with how muscles contract. It is as effective, or more so, for children with CP than diazepam and is often better tolerated. Side effects include weakness, malaise, diarrhea, and drowsiness, but the most serious potential side effect is toxicity to the liver. The medication must be stopped if it impairs liver function.[3] Diazepam Diazepam, also known as Valium, is a benzodiazepine, a type of drug that has the potential for abuse and dependence. Diazepam works by relaxing the brain and the body by acting on neurotransmitters in the brain. It can trigger withdrawal symptoms if use is abruptly stopped. Common side effects are depression, sedation, and cognitive difficulties. One study that investigated the use of diazepam in children found that most children saw positive benefits and minimized adverse outcomes when given one dose before bedtime.[4] The medication helped their muscles relax so they could engage in therapeutic stretching before bed. The effects of the stretching lasted into the following day, and no sedation was reported after waking up the next day. Other Muscle Relaxants Another type of muscle relaxant used less often for CP is tizanidine. It may cause liver damage, dizziness, drowsiness, and dry mouth.[5] Flexeril is another less common muscle relaxant for CP. It is indicated for muscle spasms and may cause drowsiness, nausea, stomach upset, dizziness, diarrhea, or constipation. Muscle relaxants used to treat CP can be useful and, for many patients, provide much-needed relief from pain and discomfort. On the other hand, they come with some risks and can cause sedation and other side effects that are hard to live with when trying to perform daily functions. As research progresses, more medications may be on the horizon that can help these patients feel better with fewer side effects. Cleveland Clinic. (2023, February 7). Muscle Relaxers. Retrieved from: . (2019, December 15). Baclofen. Retrieved from: D. and Joyner, R.W. (2023, April 3). Dantrolene. StatPearls. National Institutes of Health. Retrieved from: A. and Mathew, M.C. (2005, Jan-Mar). Bedtime Diazepam Ehnaces Well-Being in Children with Spastic Cerebral Palsy. Pediatr. Rehabil. 8(1), 63-6. Retrieved from: Institute of Diaetes and Digestive and Kidney Diseasse. (2017, January 30). Tizanidine. LiverTox: Clinical and Research Information on Drug-Induced Liver Injury [Internet].Retrieved from: 1. Marret S, Vanhulle C, Laquerriere A. Pathophysiology of cerebral palsy. Handb Clin Neurol 2013;111:169–176. 2. Andersen GL, Irgens LM, Haagaas I, et al. Cerebral palsy in Norway: prevalence, subtypes and severity. Eur J Paediatr Neurol 2008;12:4–13. 3. Himpens E, van den Broeck C, Oostra A, et al. Prevalence, type, distribution, and severity of cerebral palsy in relation to gestational age: a meta-analytic review. Dev Med Child Neurol 2008;50:334–340. 4. Blackman JA, Svensson CI, Marchand S. Pathophysiology of chronic pain in cerebral palsy: implications for pharmacological treatment and research. Dev Med Child Neurol 2018;60:861–865. 5. Pakula AT, Van Naarden Braun K, Yeargin-Allsopp M. Cerebral palsy: classification and epidemiology. Phys Med Rehabil Clin N Am 2009; 20:425–452. 6. Penner M, Xie WY, Binepal N, et al. Characteristics of pain in children and youth with cerebral palsy. Pediatrics 2013;132:e407–413. 7. Roscigno CI. Addressing spasticity-related pain in children with spastic cerebral palsy. J Neurosci Nurs J Am Assoc Neurosci Nurses 2002;34:123–133. 8. Flanigan M, Gaebler-Spira D, Kocherginsky M, et al. Spasticity and pain in adults with cerebral palsy. Dev Med Child Neurol 2020;62:379–385. 9. Jones KB, Wilson B, Weedon D, et al. Care of adults with intellectual and developmental disabilities: cerebral palsy. FP Essent 2015;439:26–30. 11. Dohin B. The spastic hip in children and adolescents. Orthop Traumatol Surg Res 2019;105(1S):S133–S141. 12. Hoffer MM, Garrett A, Koffman M, et al. New concepts in orthotics for cerebral palsy. Clin Orthop 1974;(102):100–107. 13. Novak I, Mcintyre S, Morgan C, et al. A systematic review of interventions for children with cerebral palsy: state of the evidence. Dev Med Child Neurol 2013;55:885–910. 14. MacIntosh A, Lam E, Vigneron V, et al. Biofeedback interventions for individuals with cerebral palsy: a systematic review. Disabil Rehabil 2019; 41:2369–2391. 15. Elshazly FA. Therapeutic functional electrical stimulation in hemiplegic cerebral palsy. Neurosci Riyadh Saudi Arab 2001;6:162–165. 16. Grecco LAC, Duarte N de AC, Mendonça ME, et al. Transcranial direct current stimulation during treadmill training in children with cerebral palsy: a randomized controlled double-blind clinical trial. Res Dev Disabil 2014;35:2840–2848. 17. Mathew A, Mathew MC, Thomas M, et al. The efficacy of diazepam in enhancing motor function in children with spastic cerebral palsy. J Trop Pediatr 2005;51:109–113. 18. McCormick ZL, Chu SK, Binler D, et al. Intrathecal versus oral baclofen: a matched cohort study of spasticity, pain, sleep, fatigue, and quality of life. PM R 2016;8:553–562. 19. Nemeth BA, Montero RJ, Halanski MA, et al. Epidural baclofen for the management of postoperative pain in children With cerebral palsy. J Pediatr Orthop 2015;35:571–575. 20. Harvey AR, Baker LB, Reddihough DS, et al. Trihexyphenidyl for dystonia in cerebral palsy. Cochrane Database Syst Rev 2018;5:CD012430. 21. Meholjić-Fetahović A. Treatment of the spasticity in children with cerebral palsy. Bosn J Basic Med Sci 2007;7:363–367. 22. O'Brien CF. Treatment of spasticity with botulinum toxin. Clin J Pain 2002; 18(6 suppl):S182–S190. 23. Jog M, Wein T, Bhogal M, et al. Real-world, long-term quality of life following therapeutic onabotulinumtoxinA treatment. Can J Neurol Sci 2016;43:687–696. 24. Calderón-González R, Calderón-Sepúlveda RF. [Treatment of spasticity in cerebral palsy with botulinum toxin]. Rev Neurol 2002;34:52–59. 25. Lundy CT, Doherty GM, Fairhurst CB. Botulinum toxin type A injections can be an effective treatment for pain in children with hip spasms and cerebral palsy. Dev Med Child Neurol 2009;51:705–710. 26. Wong C, Pedersen SA, Kristensen BB, et al. The effect of botulinum toxin A injections in the spine muscles for cerebral palsy scoliosis, examined in a prospective, randomized Triple-blinded study. Spine 2015;40:E1205–E1211. 27. Dauer WT, Burke RE, Greene P, et al. Current concepts on the clinical features, aetiology and management of idiopathic cervical dystonia. Brain J Neurol 1998;121(Pt 4):547–560. 28. Gelb DJ, Yoshimura DM, Olney RK, et al. Change in pattern of muscle activity following botulinum toxin injections for torticollis. Ann Neurol 1991; 29:370–376. 29. Chen J, Wang Y, Liu Y, et al. [Individualized neurosurgical treatments of spastic cerebral palsy]. Zhonghua Yi Xue Za Zhi 2014;94:376–378. 30. McLaughlin J, Bjornson K, Temkin N, et al. Selective dorsal rhizotomy: meta-analysis of three randomized controlled trials. Dev Med Child Neurol 2002;44:17–25. 31. Xu J, Xu L, Zeng J, et al. [Clinical observation of selective posterior rhizotomy for improving spasticity and gross movement in patients with cerebral palsy]. Zhongguo Gu Shang China J Orthop Traumatol 2019;32:815–819. 32. Shao X, Yu Y, Zhang L, et al. [Complications of selective posterior rhizotomy for lower limb spasticity of cerebral palsy]. Beijing Da Xue Xue Bao 2015;47:160–164. 33. Rutz E, Baker R, Tirosh O, et al. Tibialis anterior tendon shortening in combination with Achilles tendon lengthening in spastic equinus in cerebral palsy. Gait Posture 2011;33:152–157. 34. Ruda R, Frost HM. Cerebral palsy. Spastic varus and forefoot adductus, treated by intramuscular posterior tibial tendon lengthening. Clin Orthop 1971;79:61–70. 35. Lin Y, Wang G, Wang B. Rehabilitation treatment of spastic cerebral palsy with radial extracorporeal shock wave therapy and rehabilitation therapy. Medicine (Baltimore) 2018;97:e13828. 36. Li L-X, Zhang M-M, Zhang Y, et al. Acupuncture for cerebral palsy: a metaanalysis of randomized controlled trials. Neural Regen Res 2018;13:1107–1117. 37. Zhang M, Liu Z. [Effects of acupuncture on muscle tension of lower limb in children with spastic cerebral palsy]. Zhongguo Zhen Jiu Chin Acupunct Moxibustion 2018;38:591–595. 38. Jin B, Zhao Y, Li N. [Impacts on adductor muscle tension in children of spasmodic cerebral palsy treated with acupuncture at the three-spasmneedle therapy]. Zhongguo Zhen Jiu Chin Acupunct Moxibustion 2015;35: 217–220. 39. Bhinde SM, Patel KS, Kori VK, et al. Management of spastic cerebral palsy through multiple Ayurveda treatment modalities. Ayu 2014;35:462–466. 40. Lucena-Antón D, Rosety-Rodríguez I, Moral-Munoz JA. Effects of a hippotherapy intervention on muscle spasticity in children with cerebral palsy: a randomized controlled trial. Complement Ther Clin Pract 2018; 31:188–192. 41. Strashko EY, Kapustianska AA, Bobyreva LE. Experience of using hippotherapy in complex effects on muscle spirals in children with spastic forms of cerebral palsy. Wiadomosci Lek Wars Pol 1960 2016;69(3 pt 2): 527–529. Involuntary contraction of a muscle, organ or orifice For other uses, see Spasm (disambiguation). "Spasmodic" redirects here. For the British literary movement, see Spasmodic poets. Not to be confused with Cramp or Seizure. This article needs additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.Find sources: "Spasm" – news · newspapers · books · scholar · JSTOR (December 2016) (Learn how and when to remove this message) Medical conditionMuscle spasmSpecialtyNeurology A spasm is a sudden involuntary contraction of a muscle,[1] a group of muscles, or a hollow organ, such as the bladder. A spasmodic muscle contraction may be caused by many medical conditions, including dystonia. Most commonly, it is a muscle cramp which is accompanied by a sudden burst of pain. A muscle cramp is usually harmless and ceases after a few minutes. It is typically caused by ion imbalance or muscle overload. There are other causes of involuntary muscle contractions, and some of these may cause a health problem. A series of spasms, or permanent spasms, is referred to as a "spasmism". This section does not cite any sources. Please help improve this section by adding citations to reliable sources. Unsourced material may be challenged and removed. (January 2024) (Learn how and when to remove this message) Spasms occur when the part of the brain that controls movement malfunctions, causing involuntary muscle activity.[2] A spasm may be a muscle contraction caused by abnormal nerve stimulation or by abnormal activity of the muscle itself.[citation needed] The cause of spasms is often unknown, but it can be due to an inherited genetic problem, a side effect of medications, Parkinson's disease, a stroke, cerebral palsy or multiple sclerosis.[2] Old age can also cause spasms and cramp.[3] Spasms can occur in dystonia, and in spasticity. A spasm may lead to muscle strains or tears in tendons and ligaments if the force of the spasm exceeds the tensile strength of the underlying connective tissue. This can occur with a particularly strong spasm or with weakened connective tissue.[citation needed] A hypertonic muscle spasm is a condition of chronic, excessive muscle tone (i.e., tension in a resting muscle). This is the amount of contraction that remains when a muscle is not working. A true hypertonic spasm is caused by malfunctioning feedback nerves. This is much more serious and is permanent unless treated. In this case, the hypertonic muscle tone is excessive, and the muscles are unable to relax.[citation needed] A subtype of spasm is colic. This is an episodic pain caused by spasm of smooth muscle in a particular organ (e.g., the bile duct). A characteristic of colic is the sensation of having to move about, and the pain may induce nausea or vomiting.[citation needed] Antispasmodic Blepharospasm Cadaveric spasm Convulsion Cramp Cricopharyngeal spasm Ejaculation Epileptic seizure Jactitation (medic

5.Shamsoddini AR, Hollisaz MT. Effect of sensory integration therapy on gross motor function in children with cerebral palsy. Iran J Child Neurology. 2009;3(1):43–8. [PMC free article] [PubMed] [Google Scholar] 6.Michael RB. Management of spasticity. Age Ageing. 1998;27(2):239–45. doi: 10.1093/ageing/27.2.239. [DOI] [PubMed] [Google Scholar] 7.Goldstein EM. Spasticity management: an overview. J Child Neurol. 2001;16(1):16–23. doi: 10.1177/088307380101600104. [DOI] [PubMed] [Google Scholar] 8.Sanger TD, Delgado MR, Gaebler-Spira D, et al. Classification and definition of disorders causing hypertonia in childhood. Pediatrics. 2003;111(1):e89–97. doi: 10.1542/peds.111.1.e89. [DOI] [PubMed] [Google Scholar] 9.Lundy C, Lumsden D, Fairhurst C. Treating complex movement disorders in children with cerebral palsy. Ulster Med J. 2009;78(3):157–63. [PMC free article] [PubMed] [Google Scholar] 10.Amirsalari S, Dalvand H, Dehghan L, et al. The efficacy of botulinum toxin type A injection in the hamstring and calf muscles with and without serial foot casting in gait improvement in children with cerebral palsy. Tehran Uni Med J. 2011;69(8):509–17. [Google Scholar] 11.Meythaler JM. Concept of spastic hypertonia. Phys Med Rehabil Clin N Am. 2001;12(4):725–32. [PubMed] [Google Scholar] 12.Dalvand H, Dehghan L, Feizy A, et al. The effect of foot serial casting along with botulinum toxin type-a injection on spasticity in children with cerebral palsy. J Kerman Uni Med Sci. 2012;19(6):562–73. [Google Scholar] 13.Mandigo CE, Anderson RC. Management of childhood spasticity: a neurosurgical perspective. Pediatr Ann. 2006;35(5):354–62. doi: 10.3928/0090-4481-20060501-07. [DOI] [PubMed] [Google Scholar] 14.Beukelman DR, Mirenda P. Augmentative and Alternative Communication: Management of Severe Communication Disorders in Children and Adults. 2nd ed. Baltimore: Brookes Publishing; 1999. pp. 246–9. [Google Scholar] 15.Berker N, Yalçin S, editors. The HELP Guide to Cerebral Palsy. 2nd ed. Washington, USA: Global Help; 2010. pp. 30–3. [Google Scholar] 16.Ashworth B. Preliminary trial of carisoprodol in multiple sclerosis. Practitioner. 1964;192:540–2. [PubMed] [Google Scholar] 17.Tilton AH. Management of spasticity in children with cerebral palsy. Semin Pediatr Neurol. 2004;11(1):58–65. doi: 10.1016/j.spen.2004.01.008. [DOI] [PubMed] [Google Scholar] 18.Matthews DJ, Balaban B. Management of spasticity in children with cerebral palsy. Acta Orthop Traumatol Turc. 2009;43(2):81–6. doi: 10.3944/AOTT.2009.081. [DOI] [PubMed] [Google Scholar] 19.Chung CY, Chen CL, Wong AM. Pharmacotherapy of spasticity in children with cerebral palsy. J Formos Med Assoc. 2011;110(4):215–22. doi: 10.1016/S0929-6646(11)60033-8. [DOI] [PubMed] [Google Scholar] 20.Kinnett D. Botulinum toxin A injections in children: technique and dosing issues. Am J Phys Med Rehabil. 2004;83(Suppl 10):S59–64. doi: 10.1097/01.phm.0000141131.66648.e9. [DOI] [PubMed] [Google Scholar] 21.Jefferson RJ. Botulinum toxin in the management of cerebral palsy. Dev Med Child Neurol. 2004;46(7):491–9. doi: 10.1017/s0012162204000817. [DOI] [PubMed] [Google Scholar] 22.Yang TF, Fu CP, Kao NT, et al. Effect of botulinum toxin type A on cerebral palsy with upper limb spasticity. Am J Phys Med Rehabil. 2003;82(4):284–9. doi: 10.1097/01.PHM.0000056989.67763.07. [DOI] [PubMed] [Google Scholar] 23.Russman BS, Tilton A, Gormley ME Jr. Cerebral palsy: a rational approach to a treatment protocol, and the role of botulinum toxin in treatment. Muscle Nerve Suppl. 1997;6:S181–93. [PubMed] [Google Scholar] 24.Roche N, Even-Schneider A, Bussel B, et al. Management of increase in spasticity in patients with intrathecal baclofen pumps. Ann Readapt Med Phys. 2007;50(2):93–9. doi: 10.1016/j.annrmp.2006.09.005. [DOI] [PubMed] [Google Scholar] 25.Mess SA, Kim S, Davison S, et al. Implantable baclofen pump as an adjuvant in treatment of pressure sores. Ann Plast Surg. 2003;51(5):465–7. doi: 10.1097/01.SAP.0000070645.30682.93. [DOI] [PubMed] [Google Scholar] 26.Park TS. Selective dorsal rhizotomy for the spasticity of cerebral palsy. In: Rengachery SS, Wilkins RH, editors. Neurosurgical Operative Atlas. Park Ridge, IL: American Association of Neurological Surgeons; 1994. pp. 183–90. [Google Scholar] 27.Chan NNC. Physiotherapy in Spasticity Management for Children with Cerebral Palsy. Hong KongMed Bulletin. 2011;16(7):24–6. [Google Scholar] 28.Christopher M. Orthotic Management of Children with Cerebral Palsy. JPO Online Library. 2002;14(4):150–8. [Google Scholar] 29.Teplicky R, Law M, Russell D. The effectiveness of casts, orthoses, and splints for children with neurological disorders. Infants Young Child. 2002;15(1):42–50. [Google Scholar] 30.Shashi , Das SP, SVNIRTAR , Gursimrat SC Efficacy of occu-pational therapy and serial casting in lower limbs of cerebral palsy children administered with phenol nerve block. J Clin Orthop Trauma. 2011;2(1):39–45. [Google Scholar] 31.Hinderer KA, Harris SR, Purdy AH, et al. Effects of 'tone-reducing' vs. standard plaster-casts on gait improvement of children with cerebral palsy. Dev Med Child Neurol. 1988;30(3):370–7. doi: 10.1111/j.1469-8749.1988.tb14563.x. [DOI] [PubMed] [Google Scholar] 32.Gok H, Kucukdeveci A, Altinkaynak H, et al. Effects of ankle-foot orthoses on hemiparetic gait. Clin Rehabil. 2003;17(2):137–9. doi: 10.1191/0269215503cr605oa. [DOI] [PubMed] [Google Scholar] 33.Crenshaw S, Herzog R, Castagno P, et al. The efficacy of tone-reducing features in orthotics on the gait of children with spastic diplegic cerebral palsy. J Pediatr Orthop. 2000;20(2):210–6. [PubMed] [Google Scholar] 34.Buckon CE, Sienko Thomas S, Jakobson-Huston S, et al. Comparison of three ankle-foot orthosis configurations for children with spastic hemiplegia. Dev Med Child Neurol. 2001;43(6):371–8. doi: 10.1017/s0012162201000706. [DOI] [PubMed] [Google Scholar] 35.Wilson H, Haideri N, Song K, et al. Ankle-foot orthoses for perambulatory children with spastic diplegia. J Pediatr Orthop. 1997;17(3):370–6. [PubMed] [Google Scholar] 36.Maltais D, Bar-Or O, Galea V, et al. Use of orthoses lowers the O2 cost of walking in children with spastic cerebral palsy. Med Sci Sports Exerc. 2000;33(2):320–5. doi: 10.1097/00005768-200102000-00023. [DOI] [PubMed] [Google Scholar] 37.Gage J, Gormley Jr M, Krach L, et al. Managing spasticity in children with cerebral palsy requires a team approach. a pediatric perspective. Gillette Children Spatiality Health Care. 2004;13(3):3–5. [Google Scholar] 38.Dodd K, Imms C, Taylor NF, editors. Physiotherapy and Occupational Therapy for People with Cerebral Palsy: A Problem-Based Approach to Assessment and Management. 1st ed. London: British library cataloguing – in-publication data; 2010. pp. 177–90. [Google Scholar] 39.Levitt S. Proprioceptive neuromuscular facilitation techniques in cerebral palsy. Physiotherapy. 1966;52(2):46–51. [PubMed] [Google Scholar] 40.Hastings-Smith R, Sharpe M. Brunnstrom therapy: is it still relevant to stroke rehabilitation? . Physio Theory Pract . 1994;10:87–94. [Google Scholar] 41.Price R, Lehmann JF, Boswell-Bessette S, et al. Influence of cryotherapy on spasticity of the human ankle. Arch Phys Med Rehabil. 1993;74(3):300–4. [PubMed] [Google Scholar] 42.Lehmann JF, deLateur BJ. Therapeutic Heat. In: Lehman JF, editor. Therapeutic Heat and Cold. 3rd ed. Baltimore: Williams & Wilkins; 1982. pp. 110–9. [Google Scholar] 43.Hinderer SR, Dixon K. Physiologic and clinical monitoring of spastic hypertonia. Phys Med Rehabil Clin N Am. 2001;12(4):733–46. [PubMed] [Google Scholar] 44.Rassafiani M, Sahaf R. Hypertonicity in children with cerebral palsy: a new perspective. IRJ. 2011;9(0):66–74. [Google Scholar] 45.Dalvand H, Dehghan L, Feizy A, et al. Effect of the Bobath technique, conductive education and education to parents in activities of daily living in children with cerebral palsy in Iran. Hong Kong J Occup Ther. 2009;19(1):14–9. [Google Scholar] 46.Cusick A, McIntyre S, Novak I, et al. A comparison of goal attainment scaling and the Canadian Occupational Performance Measure for paediatric rehabilitation research. Dev Neurorehabil. 2006;9(2):149–57. doi: 10.1080/13638490500235581. [DOI] [PubMed] [Google Scholar] 47.Dalvand H, Dehghan L, Feizi A, et al. The impacts of hinged and solid ankle-foot orthoses on standing and walking in children with spastic diplegia. Iran J Child Neurol. 2013;7(4):12–9. [PMC free article] [PubMed] [Google Scholar] 48.Gracies JM. Pathophysiology of impairment in patients with spasticity and the use of stretch as a treatment of spastic hypertonia. Phys Med Rehabil Clin N Am. 2001;12(4):747–68. [PubMed] [Google Scholar] 49.David A, Alan L. Orthoses in the Management of Spasticity in the Lower Limb. ACNR. 2006;6(2):35–6. [Google Scholar] 50.Pirpiris M, Graham HK. Management of spasticity in children. In: Barnes MP, Johnson GR, editors. Upper motor neuron syndrome and spasticity: Clinical management and neurophysiology. Cambridge: Cambridge University Press; 2001. pp. 266–305. [Google Scholar] 51.Colangelo C. Biomechanical frame of reference. In: Kramer P, Hinojosa J, editors. Frames of Reference for Pediatric Occupational Therapy. 2nd ed. : Williams & Wilkins; 1999. pp. 257–322. [Google Scholar] 52.Khalid AM, Sabahat AW. Management of spastic cerebral palsy in the UAE: An overview. ACNR. 2009;9(2):30–2. [Google Scholar] Articles from Iranian Journal of Pediatrics are provided here courtesy of Brieflands Spasticity is common with many types of cerebral palsy (CP). Everyone handles spasticity differently, and spasms vary depending on the extent of CP. Because I have athetoid mixed CP, spasms are part of my daily life. In this column, I'd like to share some tips that I find helpful in dealing with them. Most of the time I can pinpoint a trigger for my spasticity. Stress is a huge trigger, but interestingly, it's not always my stress. If I sense that someone is sad, depressed, angry, upset, or stressed, my muscles react. One of the most annoying things about spasms is that others don't realize that I can't control them. Let's say I react when someone is sad by subconsciously tensing my muscles. They might mistakenly think I'm upset. One way to deal with spasms is by accepting them for what they are. They hurt and aren't under our control. But how we deal with them is under our control. Don't be hard on yourself, because they aren't your fault. Take a deep breath and think about positive things that relax you. Envision a beach, a warm place, or somewhere fun that you enjoy. Your body might feel better, and you hopefully will be a bit happier! Exercise can help with spasms. The more you exercise, the more tired your body will be. A tired body with CP is terrific. When your body is tired, your muscles are calmer, resulting in fewer spasms. I try to work out every day. Although I don't walk, I use a Fitbit to count my arm stretches, heart rate, and calorie intake. It keeps me accountable for my exercise, as if I didn't wear my Fitbit, I might not be as active. Swimming can keep muscles flexible and is great for arthritis and pain management. Many swimming apparatuses can help someone with CP. I find life jackets uncomfortable and difficult to swim in, but the Konfidence jacket is excellent because it holds me without being cumbersome. I take medication for my spasms. Many with CP and other neuromuscular disabilities take baclofen or have the baclofen pump. Personally, the oral version works better for me than the pump. I usually take it at night so that I can sleep. I also take it when I'm having a particularly spastic day or am attending an event I'd like to be still at. Always consult your doctor before trying new medication. Managing spasms isn't unrealistic. You just have to figure out what works for you! *** Note: Cerebral Palsy News Today is strictly a news and information website about the disorder. It does not provide medical advice, diagnosis, or treatment. This content is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read on this website. 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