THE DEVELOPMENTAL AND REHABILITATIVE "HOME"

Paediatricians are important contacts for children, youth, and families seeking advice on therapeutic options for CP. Practical resources like the "State of the evidence traffic lights", which is a continually updated and comprehensive review of interventions for CP, can help paediatricians become familiar with (and stay abreast of) therapeutic options. The tool provides visual level of evidence indicators for a range of options, using a "bubble chart" (6).

Current paediatric rehabilitation approaches promote the early initiation of "child-active", goal-directed therapies (7), rather than more "child-passive" strategies (i.e., which are "done to" the child), which aim to normalize movement through non-specific motor stimulation. Therapy goals focus on active practice of real-life tasks (e.g., walking with a walker, riding an adapted bicycle, feeding with a spoon) that are meaningful for the child and family. The GMFCS can help ensure that goals are linked to functional capabilities. For example, a child functioning at GMFCS level IV may work toward activating a start-up switch on a powered wheelchair, rather than trying to learn to walk. Asking children and caregivers what they like to do for fun can open conversations around adapting activities to promote participation and physical fitness (e.g., sledge hockey, Track 3 skiing, adapted bicycling). Recreational therapists can help find and connect families with socially stimulating recreation activities that are enjoyable for the child, provide respite for parents, and encourage community engagement. Programming varies widely depending on location, such that conversations and connection will depend on local opportunities.

Communication is an essential skill for all children. Some children with CP have dysarthria, which makes oral communication difficult. Augmentative and alternative communication (AAC) methods can maximize ability to communicate, thereby supporting inclusion, socialization, and learning. Specialized consultation is required to find methods that best "fit" each child, which can depend on factors such as manual dexterity, cognition, and vision. Options range from teaching signing or using pictures in an assistive book, to a speech-generating device or eye gaze technology that can be mounted on mobility devices to enable access wherever the child goes.

Psychoeducational assessments are essential to ensure that child care, school, and other learning environments are adapted to support an individual child's strengths and needs. Because funding is often limited for such assessments, communication and consultation between the school and a child psychologist may be needed to determine appropriate assessment timing for a child's age and stage.

SUPPORTIVE EQUIPMENT

Because hip subluxation is common in children functioning at GMFCS levels III to V, access to standing frames to promote weight-bearing activity is important. Ankle-foot orthoses, knee-extension splints, and hand-resting splints help prevent muscle contractures that can impair comfort and daily function. To prevent falls, maximize accessibility, and increase independence and ease of care, assistive furniture or equipment such as safety railings, bath chairs or shower benches, and ramps and lifts can be used at home. Such adaptations can also ease the caregiver burden. Referral to an occupational therapist for a home safety and equipment review can be invaluable.

HEALTH SURVEILLANCE

Having a consistent "medical home" for children and youth with CP helps build and strengthen long-term relationships among paediatric primary care providers, the young people they see, and families. For any family, interpersonal relationships, family function, and family well-being can be harder to maintain during life transitions and times of stress. Exploring and addressing the social determinants of health with each family who are living with inequities, and helping them to navigate systems, access counselling, or obtain respite care and other services, can profoundly impact child and family well-being.

Rehabilitation strategies are the cornerstone for managing CP, but when hypertonia causes pain, impacts care (e.g., dressing or hygiene), or limits participation, further treatment is required. A personalized referral to a rehabilitation centre or therapist with experience in hypertonia may be needed. Oral medications that have a generalized effect of reducing muscle tone are commonly used. Oral baclofen is a first-line treatment for generalized spasticity and dystonia in children with CP. Common side effects include constipation and sedation. Families should be cautioned against stopping baclofen abruptly because it can lead to rebound hypertonia. When focal hypertonia (i.e., in specific muscles or muscle groups) is causing pain, interfering with caregiving, or affecting function, periodic injections of botulinum toxin A may be considered. An evidence-based care pathway to assist clinicians treating dystonia in children with CP is available online.

Taking a systematic approach to health surveillance can help children with CP, GMFCS levels III to V (Supplementary Figure 1). Evidence-based care pathways that aid clinician surveillance and treatment for hip subluxation, osteoporosis, and sialorrhea have been established as effective. Monitoring for hip subluxation based on physical exam and an anterior-posterior (AP) pelvis X-ray should generally occur every 6 to 12 months for this population, because children with CP are at increased risk. Identifying hip migration early in children who do less weight-bearing (i.e., GMFCS levels III to V) can facilitate timely orthopaedic interventions (8). Referral to orthopaedics is typically recommended when imaging shows that >30% of the femoral head is uncovered by the pelvis, because soft tissue releases or hip reconstructive surgery may be required to prevent hip dislocation and chronic pain (8).

Promoting bone health with regular vitamin D supplements, ensuring adequate dietary calcium, and regular weight-bearing or supported weight-bearing activities are vital. Regular assessment of nutritional status and swallowing difficulties based on careful history-taking and videofluoroscopic swallowing studies, as needed, can impact counselling on intake and safe feeding. Maintaining an upright position while eating, pacing intake, and thickening liquids can help prevent food aspiration, one of the most common reasons for hospitalization in children with CP.