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Cerebral Palsy (CP): What is it? Why do we need the Speech Language Pathologist?

The purpose of this presentation is to provide an overview of what Cerebral Palsy (CP) is and the neuropathology behind this diagnosis. CP's etiology, prevalence, and how it is diagnosed will be explained. The leading focus of this presentation is the speech and language impairments that occur, and how they can be treated through speech and language therapy.

Cerebral palsy is defined as a group of disorders of the development of movement and posture causing activity, limitation, that are attributes to non-progressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of CP are often accompanied by disturbances of sensation, cognition, communication, perception, and/or behavior, and/or by a seizure disorder. CP is a neurodevelopmental condition that arises in early childhood and persists through an individual's life span. The current prevalence of CP is 2.11 per 1000 live births; this statistic only increases when taking in to account premature infants, low birth weight, and high-risk pregnancies. Individuals with CP are placed into a subtype in relation to their neuromuscular deficits. The subtypes are spastic, dyskinetic, ataxic, hypotonic, and mixed. The neuropathology behind CP has been found to come from maldevelopments of the brain, lesions located in the basal ganglia and thalamus, cortical lesions, scarring of the periventricular regions, and infarcts of the MCA. People who are diagnosed with CP receive evaluations to assess any potential deficits, including orthopedics, oromotor, vision, speech, hearing, sensory, cognitive functioning, and epilepsy.

When people think about CP, they tend to think of all the motor impairments that are associated with CP. What they forget to think about is the comorbid speech, language, and feeding deficits that typically occur. The speech and language deficits that individuals with CP have included motor speech disorders and expressive (using language through verbal or nonverbal communication), social (i.e. participating in conversation), and receptive (i.e. understanding language) language. Speech and language are crucial to an individual's overall development, social life, and future independence. Without a way to communicate they are unable to express basic needs to caregivers or parents, and as they grow older, they miss out on establishing relationships with their peers. Language development begins during the first few months of a child's life, and speech begins as early as 6 months of age. So that is why it is crucial that from a young age, children with CP participate in early intervention speech and language services to set the ground work for speech and language development. Speech language pathologists working with individuals with CP can target verbal communication, sign language, or aided communication strategies for non-verbal individuals (i.e. Assistive Augmentative Communication (AAC)). Feeding is a second area that affects individuals with CP. Feeding encompasses an individual's ability to bring food/liquids to their mouth. Feeding not only provides someone with the nutrition they need, it also helps them be independent. With the

prevalence of CP being so frequent it is important for speech language pathologists to be prepared to provide the best treatment when working with these individuals.