

ARTHRITIS IN ADULTS WITH CEREBRAL PALSY

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According to the Arthritis Foundation, “over 50 million Americans have arthritis, making it the number one cause of disability in the country.” Arthritis technically refers to over 100 types of joint diseases, though the most common type is osteoarthritis, which affects approximately 31 million people in the United States. Arthritis is more common in women and much more common in people who have other chronic conditions, such as heart disease, diabetes and obesity.

Arthritis is much more prevalent in people with cerebral palsy. A study by Peterson, et al. (2015) found that joint pain was present in 43.6% of people with cerebral palsy compared to 28% in all others. The study also found the arthritis incidence at 31.4% in people with this diagnosis compared to 17.4% in others. Joint pain and arthritis were linked to a decrease in function, particularly in mobility.

People with cerebral palsy are also much more likely to develop arthritis at a younger age in comparison with the rest of the population (Whitney, et al., 2018). The authors state that individuals with cerebral palsy are at increased risk for chronic disease due to excessive sedentary behaviors and malnutrition. The study included adults between the ages of 18 and 30 years. Adults with cerebral palsy, GMFCS levels IV-V, had a higher prevalence of osteoarthritis (7.7%) compared to those at levels I-III (3.1%). More striking was the rate of osteopenia/osteoporosis at 58.6% for those at levels IV-V and 29.1% at levels I-III. The authors state that children with cerebral palsy have an underdeveloped musculoskeletal system and that mobility deficits lead “to a progressive loss of mechanical loading, which is an essential stimulus for musculoskeletal growth and maintenance.”

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muscle pain and tissue damage (Lueder, 2004). Much of ergonomic seating design centers around providing movement to reduce this risk.

An abundance of research from the related field of ergonomic seating has found that constrained sitting contributes to arthritis, inflamed tendons and tendon sheaths, chronic joint degeneration,

People with cerebral palsy are at increased risk of arthritis. This research should inform our seating and mobility practices. It is critical to provide weightbearing (i.e., standers, gait trainers) as well as to provide movement within sedentary seated postures (i.e., dynamic seating) as much as possible and appropriate.

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Michelle Lange is an occupational therapist with over 30 years of experience and has been in private practice, Access to Independence, for over 10 years. She is a well-respected lecturer, both nationally and internationally and has authored numerous texts, chapters and articles. She is the co-editor of Seating and Wheeled Mobility: a clinical resource guide, editor of Fundamentals in Assistive Technology, Fourth Edition, NRRTS Continuing Education Curriculum Coordinator and Clinical Editor of NRRTS Directions magazine. Lange is a RESNA Fellow and member of the Clinician Task Force. She is a certified ATP, certified SMS and is a Senior Disability Analyst of the ABDA.

