TOE WALKING FACTS

Toe walking has been associated with a number of disorders such as cerebral palsy, congenital contracture of the Achilles tendon or paralytic muscular disorders such as Duchenne Muscular Dystrophy and some developmental disorders (i.e., autism) or myopathic or neuropathic disorders. Therefore, for the clinician presented with a child with toe walking, a thorough history and physical examination is a must to rule out associated disorders beyond idiopathic toe-walking.

By age 5.5 years, the prevalence of toe walking has been estimated at 2-5% in normally developing children but much higher at 41% in children with a neuropsychiatric diagnosis or developmental delays.

In 30% to 42% of children with habitual toe walking, a positive family predisposition has been reported. Idiopathic toe walkers are for the most part described as healthy with normal neurological testing. Their gait pattern is symmetric except that they choose to walk on their toes.

Abnormal sensory processing has been put forth where there is insufficient information to the brain from integrated vestibular, proprioceptive, and tactile information. Therefore, the feedback loop to “inform” normal gait is dysfunctional.

There is a growing body of research on the effects of stuctural spinal shifts on sensory processing, motor output, functional performance and sensorimotor integration. Abnormal position or movement of the spinal vertebra can develop from structural spinal shifts. These structural shifts can lead to obstruction of the nerves and it is this obstruction, called vertebral subluxations, that chiropractors correct. By removing the structural shifts, chiropractic improves nerve supply and brain function.

The child reported on in this study was 15-month-old girl who was toe walking and not nursing, bottle feeding or eating regularly. According to the child’s mother, she never walked normally and had a history of difficulty eating which began when she was three months old. She refused to nurse or bottle-feed, so her mother spent hours each day spoon-feeding her pumped milk. Once she began eating solids, she would only eat with her mother distracting her with toys or books and sneaking food in between playing.

The child was examined by the chiropractor who found abnormal toe walking, postural abnormalities and structural spinal shifts in the neck and low back. Abnormal position or movement of the spinal vertebra can develop from structural spinal shifts. These structural shifts can lead to obstruction of the nerves and it is this obstruction, called vertebral subluxations, that chiropractors correct. After five chiropractic adjustments the child began to walk and eat normally.