



PEDIATRICS

Predicting Kids' Future Posture: Proactive Prevention

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How good are you at predicting the future posture of your younger patients? You don't have to search the stars and become a modern-day Nostradamus. Chiropractors are by nature excellent posture predictors!

Alexander Pope once said, "As the twig is bent, so grows the tree." For the past 36 years, I have often reflected on this quote when treating youth in my practice. As chiropractors, we are *twig trainers* - helping direct and establish optimal posture and function in kids that can more accurately predict and ensure their future health.

We know poor gravity posture patterns at early ages can later result in biomechanical dysfunction, degeneration and disability. By contrast, an aligned spine with a gravity-balanced foundation can preserve the health and function of our bones, discs, joints, muscles, and nervous system for a lifetime.



As parents, we want to give our kids every benefit we can to grow up and have a happy and healthy future. Dr. Rand Olson has said, "Among the most sacred gifts you can give your child is the gift of health. This gift is best given by example."

Healthy Posture Training

Focusing on our children's posture is an important part of that gift. We have all heard admonition from parents to sit up or stand up taller and straighter. Deep down, most parents do have a basic understanding of how posture could affect their kids.

The Bible encourages parents to "Train up a child in the way he should go; even when he is old he will not depart from it."¹ How are we training our youth in the way they should go with their posture?

Everything functions better above when it's balanced below. Good posture starts from the ground up! As feet develop in childhood, the gravity shock force and stresses of life are likely to cause early problems. The three arches of the feet should form in the first five to six years as kids walk on natural surfaces like grass and sand. The problem is we have created a flat society; one in which we walk primarily with shoes that have poor arch support in general.

Starting at age 5, parents can visually inspect their child's feet when they step out of a swimming pool onto concrete. This could help provide early detection of advancing pronation. An increased wet surface area could reflect fallen arches or flat feet. This is a great age to begin assessing foot pronation clinically with a digital foot posture scan.

Custom orthotics can help to establish optimal posture and healthy biomechanics as kids grow rapidly. They maintain stability and support to lessen injury risk as children play and are active in sports. With proper support and foundation of the spine and pelvis, they are more likely to develop a balanced posture as they grow into adulthood.

Growing Pains vs. Gravity Posture Pains

A 13-year-old girl recently visited my office with complaints of lateral hip and upper leg pain, knee soreness, shin tightness, and foot pain; all on the right side. Her family doctor had recently told her these symptoms were most likely "growing pains."

A foot scan in our office revealed bilateral foot pronation which contributed to a postural right short leg detected on a standing X-ray. She now is feeling better by functioning better with custom orthotics, a heel lift, myofascial therapy, rehab exercises, and corrective chiropractic care. Growing pains were actually gravity posture pains!

There are so many youth exhibiting musculoskeletal complaints, yet often are ignored by allopathic medicine. From the catch-all diagnosis of growing pains to ineffective and unnecessary medication prescriptions, the functional cause of these early biomechanical problems is not being properly addressed.

Chiropractors are the go-to health care practitioners focusing on posture and our relationship to gravity. Medical specialists can be hyperfocused on their area of training and often disregard posture altogether. If families don't learn about posture from us, they will most likely never give it the full attention it deserves. If not us, then who?

Proactive Posture Prevention

Ben Franklin wisely quipped, "An ounce of prevention is worth a pound of cure." It is easier and smarter to prevent a problem from happening than to have to correct it later after it has developed. Prevention is the key to helping guide and direct youth into a positive future posture.

Life, posture, stress, and gravity will keep coming at kids from all directions daily. We need to create an early *Posture Prevention Plan* with wellness chiropractic care and custom orthotics. It is an intentional health focus that is proactive, rather than reactive. Prevention is always better now rather than waiting for intervention later.

Youth need flexible three-arch support through their entire gait cycle, which includes heel strike, mid-stance and toe-off. Gravity stress load factors affect growth and posture from an early age. Walking generates about 2.5 times and running 3.5 times a child's body weight in pound forces, adding extra physical stress throughout the kinetic chain.

Personalized orthotics can also reduce heel strike shock forces while providing a consistent symmetrical foundation of support. As children's feet grow, an updated prescription can be made for new custom orthotics every 12 to 18 months. Lightweight specialized orthotics can also be customized for youth sports activities that fit in running shoes, cleats and spikes on and off the field or court.

One of the first foot arches to collapse with pronation is the top or transverse arch. When this is flattened, it can result in an additional whole-body forward lean. Kids are already looking down at their

digital devices more than ever, adding to a forward posture and cervical kyphosis. They can develop what I call "screen scrunch stress syndrome." Looking down 60 degrees causes about 60 pounds of extra gravity stress force on the neck, upper back and shoulders.² This can plant the seeds of a future humpback posture later in life.

Custom corrective orthotics are a key component for kids and teens, providing a balanced foundation for optimal whole-body posture and function. I share with my younger patients and their parents that *orthotics are a game-changer because they are a "frame-changer."* They change their frame every day to be more gravity-balanced, helping to maintain the benefits of spinal adjustments and regular chiropractic care.

Influencing Future Posture: The Younger, the Better

There are so many chronic spinal and body conditions we treat in adults that we realize could have been prevented with better gravity posture at an early age. I often say to older patients, "I only wish this postural distortion or misalignment could have been addressed when you were a child or teen. So much could have been prevented and avoided."

As we treat and educate adult parents about the consequences of their chronic postural conditions, it's a great bridge to discuss the importance of postural care for their children. Chiropractors need to test and check gravity posture in kids throughout all the growth stages of childhood. Our training and experience have made us not only good posture predictors, but we also can greatly influence future posture in our patients - the younger, the better!

References

1. English standard version Bible, 2001: Proverbs 22:6.
2. Hansraj K. Assessment of stresses in the cervical spine caused by posture and position of the head. *Surg Tech Int*, November 2014;25:277-9.

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