ScoliosisKC



HOPE Just a Few Degrees Away.



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Dr. Nick Weddle DC
Meet Your Doctor

"Too much of healthcare is centered around covering up pain or other symptoms with drugs. You might feel better temporarily, but the problem is still there.

This is why so many people are suffering from heart disease, cancer, diabetes, ect. We have to actually fix the problems and get the body healthy, and that rarely requires drugs."



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PERSONAL

Dr. Nick became a chiropractor as a result of having 22 years of chiropractic care by his Stepfather, Dr. David Zak. "I saw the difference it made in my family compared to everyone around me; we were sick much less. We rarely needed medication. I was 17 years old the first time I ever saw a medical doctor." Dr. Nick enjoys life with his wife Keri, and their daughter, Solibel. They are actively involved in their church. He strives to provide scoliosis awareness in an effort to prevent fusion surgeries. He desires to see more kids getting chiropractic care. His future goals are to support more pregnant women with chiropractic care and to become a Certified Childbirth Educator.

PROFESSIONAL

Dr. Nick is the only Certified CLEAR Scoliosis Institute doctor in the state of Missouri. Patients have traveled from several states away to experience the CLEAR treatment with Dr. Nick. He obtained his Pre-Med degree from William Jewell College and his doctorate from Cleveland Chiropractic College. He became certified with the CLEAR Scoliosis Institute in 2015. Dr. Nick has served with ChiroMission, providing thousands of people free Chiropractic care in the Dominican Republic, as well as spending time in Germany, Haiti, Guatemala, and the U.S. doing volunteer service ministry and youth ministry.



to ScoliosisKC!

We are excited to present our unique program for treating scoliosis in children and adults. Scoliosis is not simply a sideways curve of the spine, but rather a complex condition made up of numerous variables in a 3-dimensional presentation.

Read through the information, and note any questions you have.

At your local CLEAR Scoliosis Clinic, Hope is just a few degrees away.

"After one week of treatment, my lumbar curve went from 42 to 29 and thoracic curve went from 31 to 26.

Before, I was filled with such hopelessness and fear from seeing myself get worse each year.

> Now I have hope, I have my life back, I finally feel wonderful!"

> > -Joan, Mississippi

Visit ScoliosisKC.com

to learn more and watch a few short videos.



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Whether you're "watching & waiting" for your scoliosis to get worse, or

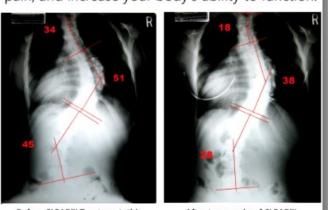
considering bracing or surgery,

We Can Help You.

The research article on our methods is listed as the MOST-HIGHLY ACCESSED ARTICLE of ALL-TIME

http://www.biomedcentral.com/bmcmusculoskeletdisord/mostviewedalltime/

We use scientifically-proven methods to make your spine straighter, help you to breathe better,



Before CLEAR™ Treatment, this patient was a candidate for surgical intervention (Cobb Angles >40 degrees).

After two weeks of CLEAR™ Treatment, all of the patient's Cobb Angles have been reduced to below surgical thresholds.

improve your posture & appearance, reduce your pain, and increase your body's ability to function.

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OBSERVATION

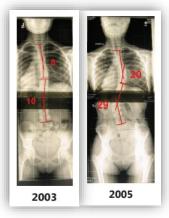
EVERY BIG CURVE STARTED OUT SMALL. TAKE ACTION NOW.

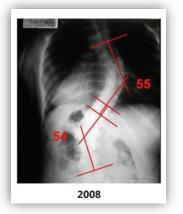
It is important to recognize that:

- \rightarrow Many cases of scoliosis will continue to progress.
- → Scoliosis can continue to progress after skeletal maturity.
- → Even a small curvature can cause problems with breathing.¹

Will my scoliosis get worse?

The rationale behind observing a mild scoliosis is that, once a patient reaches the age of 18, the scoliosis will not progress. However, this is not supported by research. **It has been known since 1969 that scoliosis can continue to progress after skeletal maturity.** ² Collis and Ponseti followed 215 cases of scoliosis after maturity; and documented an average worsening of 15 degrees.³ Weinstein et al showed that 68% of cases of scoliosis progress after skeletal maturity.⁴ Korovessis et al reported a mean progression of 2.4 degrees per year over the course of 5 years in skeletally mature patients.⁵ Danielson and Nachemson found that 36% of adolescents with scoliosis had progressed by more than 10° after 22 years.⁶





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THE TRUTH ABOUT TRADITIONAL BRACING

The truth about traditional bracing as a treatment for scoliosis:

- → Traditional bracing will not correct scoliosis.
- \rightarrow Braced or not, there is little difference in the end result.
- → Many patients who wear a traditional brace continue to get worse.

"My doctor is recommending a traditional hospital brace for my scoliosis."

The goal of traditional bracing is not to correct your scoliosis, but to prevent your curvature from progressing to the point where surgical intervention becomes necessary. **However, Dolan & Weinstein documented that 23% of patients who wore a traditional brace still ended up undergoing spinal fusion surgery.**⁶ In comparison, 22% of patients who did nothing underwent surgery for their scoliosis later in life. The evidence in support of traditional bracing is extremely poor, earning an overall rating of "D" in a review of the scientific literature. Scoliosis braces can be bulky, uncomfortable, and awkward. At a time in life when "fitting in" means everything, they can be a source of constant teasing and shame to many young people. The benefits of traditional bracing are dubious and unpredictable, but the side effects are certain.

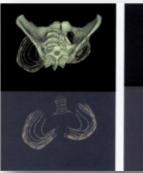
The effect of traditional bracing on lung function & the rib deformity

Using the EOS 3– dimensional x-ray system, it is possible to see the effect of bracing upon the rib

cage deformity. It can be clearly seen that traditional bracing can cause the rib protrusion to worsen, and can compress the rib cage, making breathing difficult.

There is a better way.

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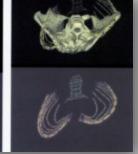


Figure 3.1 Top-down 3D Image without Brace

Figure 3.1 Top-down 3D Image with Brace

SURGERY

"I WAS TOLD SURGERY IS THE ONLY OPTION FOR ME."

Four facts that every patient & parent should know about surgery for scoliosis:

- → Scoliosis can continue to get worse even after spinal fusion.⁷
- → Over 20% of patients require more than one operation. ⁸

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- → 40% of patients are legally disabled 16 years after the procedure.⁹
- → It does not cure the disease of scoliosis, but rather replaces one deformity (a flexible, curved spine) with another (a straighter, fused spine).¹⁰



When traditional bracing fails, as it often does, spinal fusion surgery is often presented as the only choice to prevent the curvature from worsening. Long-term evidence, however, suggests that living with a fused spine may be worse than living with a curved one. **38% of patients stated that, if they had the chance to go back in time, they would not have undergone the surgery.**¹¹ 76% of patients suffer from back pain after 10 years." After 15 years, patients report increased difficulty sitting, standing, carrying, bending at the waist, participating in sports, lying on their backs or sides, lifting, performing household chores, and driving a car.¹² **In every patient who undergoes spinal fusion surgery, there is a permanent loss of spinal flexibility and function.**¹³

The documented risks of scoliosis surgery are bone fragments or instrumentation penetrating into the spinal canal; breakage of the implants; and, compression of the spinal nerves.¹⁴ This can lead to neurological deficits such as partial or total paraplegia, quadriplegia, or peripheral nerve damage—which may occur immediately after the operation, or as much as 10 years later.¹⁵

Surgery does not reduce rib deformity; instead, thoracoplasty (shaving down the ribs) or rib removal is often recommended for this purpose. This can result in a serious and permanent impairment of normal lung function, and can in fact cause the scoliotic curvature to progress.¹⁶ Even when the rib hump improves after spinal fusion, in the majority of patients, the improvement is temporary, and eventually the situation is worse than it was before.¹⁷

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TOP 10 REASONS TO CHOOSE THE CLEAR PROGRAM FOR CORRECTING YOUR SCOLIOSIS

1) Research proves our specialized approach to scoliosis achieves results.

The article, "Scoliosis treatment using a combination of manipulative and rehabilitative therapy: a retrospective case series," published by Drs. Morningstar, Woggon, & Lawrence in BMC Musculoskeletal Disorders, on September 14th, 2004, was a landmark in the realm of conservative scoliosis treatment. Within two years of its publication, it achieved the status of Most Highly Accessed Article of All-Time in this journal, and continues to hold this title as of 2009, with over 36,000 views (number two has just under 24,000).¹

Since 2004, there have been additional reports in the literature regarding the efficacy of chiropractic or osteopathic manipulative therapy in the treatment of scoliosis, in combination with deep tissue massage and physical therapy, that have demonstrated positive results.²⁻⁴

Our most recent research submission followed 140 patients from ages 9 to 84 with Cobb Angles ranging from 5 to 109, and demonstrated an average reduction of 37.7% after 12 visits. 23 patients were no longer classified as having clinically-diagnosable scoliosis after treatment.

Unlike a surgical or braced reduction of the Cobb Angle, the reductions achieved through our methods also correlate with improved lung function, increased rib expansion, decreased pain, increased physical functioning, and better quality of life overall.



TOP 10 REASONS TO CHOOSE THE CLEAR PROGRAM FOR CORRECTING YOUR SCOLIOSIS

2) Traditional bracing does not change the course of Scoliosis.

The purpose of traditional bracing is not to correct scoliosis, but to stop it from getting worse. Unfortunately, even with proper compliance (wearing the brace for 23 hours every day), it frequently fails in doing so. Dolan & Weinstein documented that 23% of patients who wore a traditional brace still ended up undergoing spinal fusion surgery.⁶ In comparison, 22% of patients who did nothing underwent surgery for their scoliosis later in life. The evidence in support of traditional bracing is extremely poor, earning an overall rating of "D" in a review of the scientific literature.⁷

Traditional bracing can be very emotionally-scarring, at a time in life when "fitting in" means everything, wearing a brace can be a traumatic experience in a young person's life, with some people going so far as to say it left them with a "psychological scar."⁸ In addition to the emotional effects, the physical side effects of wearing a traditional brace can include pain, skin & bone problems, and impairment of normal lung function.^{9–13}

3) Surgery does not cure the disease of scoliosis, but rather replaces one deformity with another.¹⁴

Many people choose surgery because they just want their worries about scoliosis to be over. However, scoliosis surgery is not the final solution; merely an irreversible one. Scoliosis can continue to get worse even after spinal fusion, and over 20% of patients require more than one operation.¹⁵⁻¹⁶ Furthermore, 40% of patients are legally disabled 16 years after the procedure.¹⁷ Long-term evidence suggests that living with a fused spine may be worse than living with a curved one. 38% of patients stated that, if they had the chance to go back in time, they would not have





TOP 10 REASONS TO CHOOSE THE CLEAR PROGRAM FOR CORRECTING YOUR SCOLIOSIS

undergone the surgery.¹⁸ 76% of patients suffer from back pain after 10 years.¹⁶ After 15 years, patients report increased difficulty sitting, standing, carrying, bending at the waist, participating in sports, lying on their backs or sides, lifting, performing household chores, and driving a car.²⁰ In every patient who undergoes spinal fusion surgery, there is a permanent loss of spinal flexibility & function.²¹ The documented risks of scoliosis surgery are bone fragments or instrumentation penetrating into the spinal canal; breakage of the implants; and, compression of the spinal nerves.²² This can lead to neurological deficits such as partial or total paraplegia, quadriplegia, or peripheral nerve damage—which may occur immediately after the operation, or as much as 10 years later.²³ Surgery does not reduce rib deformity; instead, thoracoplasty (shaving down the ribs) or rib removal is often recommended for this purpose. This can result in a serious & permanent impairment of normal lung function, and can in fact cause the scoliotic curvature to progress.²⁴ Even if the rib hump does improve after spinal fusion, in the majority of patients, the improvement is temporary, and eventually the situation is worse than it was before.²⁵

The truth is, spinal surgery is an invasive and dangerous procedure, and one that should only be undertaken after all other options have been exhausted. Unfortunately, it is increasingly being recommended as the first resort for children with progressive scoliosis and adults with painful scoliosis. Once done, it cannot be undone; to operate or not is an important decision, and all factors should be considered carefully before committing to spinal fusion surgery.²⁶

4) Researchers around the world recognize the need for a better way.

Provided the use of a complete comprehensive approach, there is very little doubt that it is





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possible to reduce the need for surgery in the treatment of scoliosis.²⁷

It cannot be argued against that there is a need for the advancement of research into manners by which a mild case of scoliosis can be prevented from developing into a serious visible deformity.²⁸ If traditional bracing and surgery were successful, reliable, and effective ways of treating scoliosis, there would not be a need for advancement into new treatment methods. Also, there is increased need for physicians of all specialties to collaborate in the realm of scoliosis treatment.²⁹ CLEAR Institute is fulfilling these needs by attending conferences of international scoliosis experts, working with recognized scoliosis specialists in all fields of healthcare, participating in debates about the future of scoliosis treatment, and providing more options to people living with scoliosis.

5) Our treatment addresses scoliosis 3-dimensionally, in accordance with established laws of biomechanics, to correct the spine in every dimension.

It is well-recognized that two of the main factors involved in the progression & etiology of idiopathic scoliosis (IS) are biomechanical and neuromuscular.³⁰ It is also proposed that the biomechanical and neuromuscular factors involved in the progression of scoliosis contribute to a cyclical pattern that leads to further progression ('vicious cycle').³¹

Millner & Dickson described a biomechanical conceptual understanding of scoliosis in 1996 when they pointed out that, "For centuries, engineers have recognized that the mechanical behavior of a





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column under load is influenced by geometry, as well as by material properties; it is clear that the spinal column also obeys these well-described laws." They then went on to extrapolate on this concept, when they described scoliosis as a viscoelastic, three-dimensional "buckling" of the spine in both the coronal (side-to-side) and sagittal (front-to-back) plane, and noted that successful reproduction of scoliosis in an animal model occurs only when the normal sagittal alignment of the spinal column has been disrupted.³² This sagittal disruption has been noted and confirmed by several other authors.³³⁻³⁸ Researchers have even been able to predict the thoracic kyphosis by evaluating the coronal thoracic curvature, the lumbar lordosis, and the slope of the first lumbar vertebra.³⁹ New research has discovered that a kyphotic cervical curvature occurs more frequently in patients with severe scoliosis than in a normal population.⁴⁰ Axial rotation of vertebrae has been implicated as a risk factor for progression of scoliotic curvature.⁴¹ A positive correlation between the degree of the sagittal & axial disruption and the magnitude of the resultant lateral curvature has been documented.⁴² It has also been documented that spinal imbalances have the capability of producing forces which can influence curve progression.⁴³ It could be taken as an axiom that if certain forces are capable of influencing progression, other biomechanical forces should be capable of influencing the regression of spinal curvature, and it has been suggested that a chiropractic physician who understands the biomechanics of scoliosis may have a rationale for the treatment of scoliotic curvatures.⁴⁴ The etiology behind so-called idiopathic scoliosis is extensively biomechanical and driven in large part by neuromuscular imbalances.⁴⁵ Addressing & reversing the neuromuscular & biomechanical imbalances is the goal of CLEAR treatment, and this treatment approach is effective in patients of all ages. This is supported by research which suggests that structural deviation of the nucleus pulposa can greatly affect the progression of scoliosis .46-48 Physical rehabilitation has been demonstrated to be successful in the management of herniated nucleus pulposa.49 Physical exercises, postural remodeling, and proprioceptive neuromuscular





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re-eduction, combined with manual therapy that is performed with the purpose of achieving specific structual corrections (rather than simple mobilization of a spinal joint), are effective ways of altering the biomechanical forces affecting the spine and thus vertebral column loading. As stated by several preeminent scoliosis researchers, the primary factors influencing progression of the scoliotic spine are biomechanical (shear forces and asymmetrical loading of the vertebrae leading to vertebral wedging as per the Heuter-Volkmann Law, often referred to as the 'vicious cycle' in discussions regarding the pathogenesis of scoliosis), so a spinal biomechanical approach to treatment with the goal of reducing and reversing these forces is logical and has been proposed by other authors.⁴³⁻⁴⁴ This vicious cycle has been shown to develop in 3 dimensions, not merely in 2, and so biomechanical treatment aimed at reducing axial & sagittal deviation of the spine appears every bit as necessary as reduction of the lateral deviation.³¹⁻³²

6) The CLEAR approach is the only system that re-trains the brain and spine to work together.

It has been well documented that patients with scoliosis demonstrate a significant increase in neuroanatomical abnormalities of the corticospinal tract, as well as neurophysiological abnormalities, especially in the areas of vestibular function, proprioception, vibratory sensation, postural reflex mechanisms, abnormal reflex processing, and disordered postural equilibrium.⁵⁰⁻⁶⁰ Lateralization of neurophysiology also occurs more frequently in patients with idiopathic scoliosis (IS), and this can be correlated to the convexity of curvature.⁶¹⁻⁶³ However, it has been suggested that this laterality is a result, rather than a cause, of scoliosis.⁶⁴ While many authors have suggested that brain asymmetry may play a role in the etiology of scoliosis, one recent study did





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"not support the concept of a generalized brain asymmetry in idiopathic scoliosis," but noted instead that the trend towards asymmetrical neurophysiology was "probably representing subclinical involvement of the corticospinal tracts secondary to mechanical compression." ⁶⁵ The goal of the chiropractic manipulative therapy provided by CLEAR doctors is to reduce this mechanical compression and thus restore normality.

Neurophysiological compensations may develop as a mal-adaptation to disordered spinal structure; similarly, disordered spinal structure may create muscle imbalances & exacerbate existing neuromuscular imbalances.⁶⁶ Scoliosis has been induced in an animal model following unilateral vestibular compromise (when one part of the balance system of the body was disrupted).⁶⁷ However, scoliosis only developed when the animals were subjected to gravity, thus lending further credence to the statement made by Stokes, Burwell & Dangerfield that, "independent of whether a scoliosis is congenital, neuromuscular, or idiopathic, mechanical factors become predominant relative to initiating factors during rapid adolescent growth, when the risk of curve progression is greatest" or, as expressed succinctly by Hawes & O'Brien, "no matter what you believe to be the cause of AIS, ultimately the problem can be reduced to the production of an imbalance of forces along the spine."^{31,68} The simplest explanation for the cause of scoliosis is a biophysical adaptation to gravity. Understanding why this adaptation occurs is paramount to designing an effective treatment regimen.

Using innovative concepts such as whole-body vibration and advanced spinal weighting techniques to improve the body's posture & balance and retrain how the brain activates different muscles in response to gravity, we are able to address the neuromuscular compensations that occur in scoliosis.⁶⁹⁻⁷²





TOP 10 REASONS TO CHOOSE THE CLEAR PROGRAM FOR CORRECTING YOUR SCOLIOSIS

7) We recognize both the genetic and the environment factors in scoliosis, and evidence supports the concept that by treating the biomechanical & neuromuscular risk factors, you can change your genetic risk factors.

It has been recognized since 1980 that scoliosis is a multi-factorial disease, and is not associated with any one particular gene.⁷³ There is no 100% concordance of symptoms or prognosis in monozygotic twins; family history has not found to be predictive in any way of curve progression or severity; and for most individuals, there is no defining evidence of an inherited disorder.⁷⁴⁻⁷⁶ Interestingly enough, sagittal spinal profile has also shown to have familial tendencies.⁷⁷ The best inference that can be made at this time is that the interaction between genetic and environmental factors causes IS."78 These genetic risk factors can be identified using a test called ScoliScore, which is currently available in every CLEAR-certified clinic. This test predicts the chance that a scoliosis will progress to the point of requiring surgical intervention, and is effective in mild curves in skeletally immature spines. This is just one way we show our commitment towards incorporating the latest research & technology to serve our patients. Medical doctors have been able to reduce the genetic risk factors in patients at a high risk for developing prostate cancer through dietary changes and lifestyle modification.⁷⁹ There is every reason to believe that CLEAR treatment can change an individual's genetic risk for seeing their scoliosis get worse by restoring normal spinal alignment, and thus reducing the biomechanical & environmental factors that contribute to progression of the curvature.





TOP 10 REASONS TO CHOOSE THE CLEAR PROGRAM FOR CORRECTING YOUR SCOLIOSIS

8) We use x-ray technologies that are significantly safer, and more clinically applicable, than traditional full-spine radiography.

The x-rays that are taken by CLEAR-Certified doctors expose the patient to significantly less radiation than a standard full spine film. According to the American Nuclear Society (www.ans.org), the average person is exposed to roughly 300 mR of naturally-occurring radiation every year. The seven "spot" views of the spine that are taken by a CLEAR doctor total 295 mR. By comparison, a single full spine exposes the patient to 300 to 400 mR of radiation. The reason that a full spine film is so much greater is because the strength of the x-ray beam must be turned up to adequately penetrate all of the patient's tissues. In addition, the phenomenon of "scatter" causes x-ray penetrance to decrease as the film size becomes larger; this is why a small "spot" view is significantly less dangerous. X-rays in truth are one of the least dangerous diagnostic procedures used in medicine today, but suffer the greatest concerns about exposure; CT scans (of which over 70 million were performed in 2007 alone) expose the patient to 8,000 to 31,000 mR of radiation.

In addition to the amount of exposure, it's also important to consider the clinical value of the x-ray. If an x-ray is taken simply to "monitor" a scoliosis, and no clinical information regarding the patient's treatment can be derived from the x-ray, was it really worth it? The progression of a patient's scoliosis can be tracked in many different ways, such as MRI or surface topography. Xrays as a system for monitoring the progression of scoliosis seem anachronistic and outdated at best, downright irresponsible at worst. CLEAR doctors utilize a device called a Scoliometer to periodically evaluate the progression of a patient's scoliosis—only if it appears to be worsening as measured by the Scoliometer are additional x-rays taken.





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The seven spot views taken by a CLEAR doctor are designed to provide the doctor with specific information about the biomechanical factors that are influencing the scoliosis in that specific patient's case. Every scoliosis is unique—it's impossible to design a "one-size-fits-all" exercise program that will work for every patient, or develop one "magic" chiropractic adjustment that corrects every patient's posture. Only through objective precision x-ray analysis can the exact biomechanical factors involved in a specific case of scoliosis be identified. Then, everything—the exercises, the adjustments, the therapies—are designed around that patient's specific spinal configuration. The information in these x-rays gives us the knowledge we need to make effective clinical decisions that will give the patient the best possible results. Clearly, the clinical value of these seven x-rays is much greater than a single full spine which is taken only to monitor progression.

Today's x-ray machines are a thousand times safer than the devices used in the past, for which a documented increased risk is published. Recent studies conducted on post-1980 devices find only a minimal risk, compared to pre-1970's, which found a significant risk.^{80,81} The x-ray technologies in use in the 21st century are even safer. According to the most current scientific literature, the risks of living with scoliosis are significantly worse than the risks of radiation exposure.

9) Doing something is better than doing nothing.

The rationale behind observing a mild scoliosis is that, once a patient reaches the age of 18, the scoliosis will not progress. However, this is not supported by research. It has been known since 1969 that scoliosis can continue to progress after skeletal maturity.⁸² Collis & Ponseti followed 215





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cases of scoliosis after maturity; and documented an average worsening of 15 degrees.⁸³ Weinstein *et al* showed that 68% of cases of scoliosis progress after skeletal maturity.⁸⁴ Korovessis *et al* reported a mean progression of 2.4 degrees per year over the course of 5 years in skeletally mature patients.⁸⁵ Danielson & Nachemson found that 36% of adolescents with scoliosis had progressed by more than 10° after 22 years.⁸⁶

Idiopathic scoliosis (IS) is often described as asymptomatic, but it is often associated with changes in pulmonary function—even patients with mild IS may present with reduced lung capacity.⁸⁻⁹⁴ Patients with no readily apparent pulmonary deficiencies may reveal decreased ventilatory function during maximal exercise.⁹⁵⁻⁹⁶ Cosmetic appearance and self-image can be affected.⁹⁷⁻¹⁰² Pain increases in incidence & severity with age in both adolescents & adults.¹⁰³⁻¹⁰⁷

10) The CLEAR system is cost-effective and has the best value.

According to an article published in 2000, It costs \$3,386.25 per year simply to monitor a child with a curve of 20 degrees or more—this is "observation only" - just doctor's visits and x-rays, with no treatment provided.¹⁰⁸ To treat a child with a traditional brace costs \$10,836.00 per year, and this does not include the actual cost of the brace, which may range from \$10,000 to \$20,000. Scoliosis surgery, in 2000, cost \$120,000. It is significantly more expensive today, and multiple operations are sometimes required. In the event of hardware failure, the surgery to remove the instrumentation takes twice as long and costs twice as much. Should this become necessary, all correction achieved by the surgery is typically lost, although the damage to the spine, discs, muscles, tendons, and ligaments remains.





TOP 10 REASONS TO CHOOSE THE CLEAR PROGRAM FOR CORRECTING YOUR SCOLIOSIS

In contrast with traditional bracing (which seeks only to stabilize the progression of the Cobb Angle), the goal of CLEAR treatment is to provide a measurable reduction of the Cobb Angle, and also to help you to breathe better, improve your posture & appearance, reduce your pain, and increase your body's ability to function.

While every CLEAR clinic is independent and responsible for setting their own fees, on the average, the cost of treatment is significantly less expensive than traditional bracing, with a much better expected outcome. Many insurance companies may cover as much as 60 to 70 percent of the total cost of treatment, as well.

By choosing the CLEAR method, you are making a long-term investment in your health that may prevent the need for other, more costly treatments down the road.



Dr. Nick Weddle—CLEAR Certified Doctor





SCOLIOSIS TREATMENT

KIDS & TEENS

Treatment for kids and teens is focused on the early detection and prevention of further progression. Remember, every large curve starts as a small curve. The sooner the condition can be diagnosed, the sooner it can be treated. When treating patients under approx. 16 years old, there is a good chance the curves may still be increasing as they grow, some faster than others. This will be determined by factors such as age, height, amount of growth in the last several years, and Riser Sign (x-ray measurement of skeletal growth). If that is the case, the primary goal will be to stop or slow the progression, and to reduce the curves as much as possible. Depending on the age treatment is started; the process may take several years to stabilize/reduce the Scoliotic curves. It is important to remember that Scoliosis is a neurological condition, with no cure. Although there are different treatment options available, patients will have scoliosis for their entire life. So, we want to take advantage of the time while a patient is younger, to make as much correction as possible before a curve gets worse, and when the correction process becomes more difficult.

ADULTS & SENIORS

Treatment for adults and seniors is based on each individuals' unique presentation. Some adults have an advantage to younger patients. Younger patients can experience increased curves with growth; whereas, in adults the progression is typically complete once they reach approx. 17-20 years old. Therefore, some adults, especially those with very flexible spines, can achieve good reduction of their Scoliotic curves. However, others will have a disadvantage due to the many years they have had the condition. They will typically have less flexibility and a more rigid spine, limiting the ability of the spine to correct. These patients can still have significant improvements in pain levels, and overall spinal flexibility and motion. The in-office and at-home therapies will still be the same for these patients, but we simply recognize that there is a decreased potential for curve reduction. Many of these patients will view their goals/success in terms of pain reduction or spinal flexibility, and less about curve reduction. That said, we have had good results with both a 51 and 60 year old patients performing the Scoliosis Correction program.





WHAT TO EXPECT:



Treatment Frequency: The treatment plan consists of approximately 18 visits of in-office treatment, followed by 2-4 months of continued home therapy. **That said, every patient is different, and each plan will be decided based upon the specific needs of the patient.** Additionally, depending on the age of the patient, many will need to continue to perform their specific therapies for months and even years to continue to work against the abnormal biomechanics that are part of Scoliosis (for example, a child who has not yet reached physical maturity, and thus are still growing allows for the potential for their curves to increase).

In-Office Treatment Time: Each in-office treatment lasts approximately 2.5 hours. Some

visits may be longer near the beginning of treatment, as we are assessing and modifying the therapies/setups for each patient. Most individual therapies last between 10-30 minutes each. I encourage each person/family who is apart of this program to allow plenty of time, especially at the beginning of care, to create a new rhythm and schedule in their life to set you/your child up for success in this work. This program requires commitment to both the in-office treatments as well as to the home therapy exercises.

Home Therapy Time: Daily home therapies include two—20 minute sessions of the 'balance' training (NMR) and 5-10 min of specific isometric exercises. This can seem like a lot of work, but there are other 'rehab' programs out there that require up to 4 hours per day of exercise. I like to think that the CLEAR program is very reasonable to fit into even the busiest of lives.





WHAT TO EXPECT:

New Patient Exam & CLEAR X-rays: This will include doing a number of physical tests, which will require you to sit, lay face-down, face-up, standing, bending, and even balance tests. We will also perform the necessary x-ray pictures, as well as posture photographs. Also, if you have x-ray films or MRI films from another doctor, new or old, you should bring those with the reports to this exam. Any past information of your condition will help in the treatment of it now. We do not gown patients when taking x-rays, so appropriate clothing is required. Please wear comfortable clothing, but <u>preferably something tighter than looser, such as exercise clothes.</u> For women, it is best if you wear a sports bra, or tight tank-top. This will improve our ability to visually access your posture and skeletal position (especially with a high mid-back Scoliotic curve). Please avoid clothing with metal buttons or zippers, as the metal will show up on x-ray. If you have any questions or concerns, please contact us before the exam.

Daily Treatment: For your comfort, please wear clean comfortable clothing, such as exercise clothes. Some patients wear jeans and are fine, but typically the softer clothing the better. If you are coming from work, or school, you are welcome to bring clothes and change once you are here. Occasionally, we will need to take additional x-rays on a day of treatment, so it's a good idea to refrain from wearing clothing with metal, ect. (hoodies with front zipper, metal decorations, ect.). We recommend that you wear a <u>T-shirt</u> (not a sleeveless t-shirt or tank top, as the sleeves will help prevent straps from rubbing under your arms), and <u>bring or wear an additional long-sleeved t-shirt or sweatshirt</u> in case you become cold while in the clinic. Please bring a water bottle (no soda or sugary drinks), and a snack to prevent you from being excessively hungry during your treatment (or make sure you eat before treatment). Patients are welcome to bring a phone/iPod with headphones to







utilize during some of the therapies.

SPORTS & EXERCISE

The CLEAR Scoliosis Institute recommends that patients undergoing treatment <u>limit or restrict</u> their participation in the following sports and activities:

Collison sports: football, hockey, rugby, full-contact martial arts, cheerleading, gymnastics, pole vaulting, lacrosse

One-sided or rotational sports and activities: golf, tennis, bowling, shot put or javelin, string or wind instruments such as flute or violin

Repetitive, compressive sports or activities: long-distance running, horseback riding, off-road cycling, triple jump or long jump, weight lifting, drum line or marching band

Exercises which compromise the health of the spine: sit-ups, push-ups, and pull-ups

The patient should avoid participation in any activities which cause or increase pain or other musculoskeletal symptoms.

The CLEAR Scoliosis Institute encourages patients to participate in the following sports/activities:

Swimming (non-competitive); avoid the butterfly stroke (freestyle, backstroke, or breaststroke are preferred); scuba diving and diving are also permissible, cycling (not off-road cycling), walking, hiking, and sprinting (avoid long-distance running and jogging), aerobics—such as dance, color guard, yoga, and flexibility training.

Also encouraged, table tennis/ping pong, foosball, croquet, badminton, and shuffle board

Gliding-type activities such as cross-country skiing, as well as ellipticals, Nordic track, Gazelle edge, and similar exercise machines that do not involve repetitive shocks and short-term, high-intensity exercise (burst training) is preferable to endurance training.

* Specific Recommendations will be made for each patient after completing the Scoliosis Exam.





SCOLIOSIS TREATMENT EXERCISES

<u>NMR</u>: Weights and cantilevers are positioned on the body to help improve how a person with scoliosis will balance and react to gravity. <u>Vibrating Traction</u>: Patient lies on a roll below the neck or the low back. The roll is connected to a motor, that moves to a very unique vibrational frequency. It's used to remodel ligament structure; aiding with molding the proper neck curve.





Eckard Table: The patient lies face-down, and the lower half of the table lowers up and down repeatedly. This provides gentle, intermittent traction to the spine, while the straps pull the spine into a better position.



<u>Core Stim</u>: Massage therapy performed with the aid of a special percussive device.

Scoliosis Traction Chair: Spinal traction with vibration at a specific frequency for postural remodeling.





SCOLIOSIS TRACTION CHAIR

Scoliosis Traction Chair Information for home use:

According to the CLEAR Scoliosis Institute protocol guidelines, patients with curves greater than 30° will need to obtain a Scoliosis Traction Chair (STC) for daily use at home. The daily home-use of the STC requires up to two, 30 minute sessions in the STC (morning and evening), for a total of 60 minutes of extra exercise.

Many families will try to find a used STC - Craigslist, eBay, and Vibe for Health (phone 866-520-4270) which often cost between \$2500 and \$3200. New STC from Vibe for Health cost \$4,144 (shipping included). Vibe for Health is the manufacturer and exclusive seller of the STC. Also, if purchasing from them, I will need to provide a Prescription Form to authorize the patient's purchase.

Although this is a substantial cost, once the patient is finished using the STC, you will be able to sell it to either a new patient directly, or back to Vibe for Health. Vibe for Health has a Buy-back program (most will be able to get back at least 50-75% of the cost if sell-ing to another patient, so it's a good value in the long run).

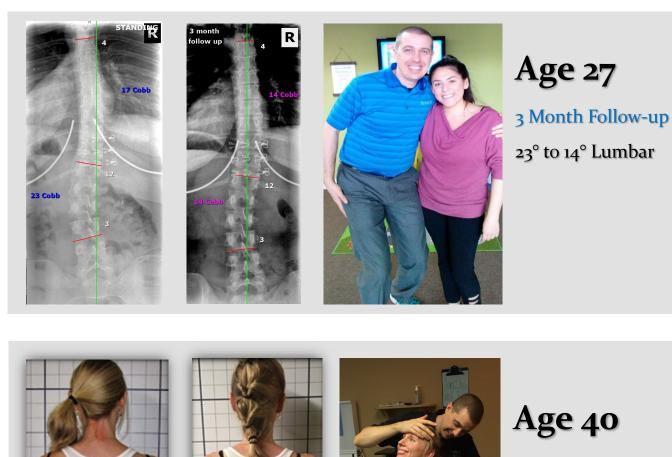
Additionally, I think it is important to state that I am in no way connected to Vibe for Health or CLEAR besides my membership as a doctor under the CLEAR non-profit, so there is no financial benefit to me if my patient purchases a STC for home use.

Any questions contact Dr. Nick by email or phone.





SCOLIOSISKC OUTCOMES



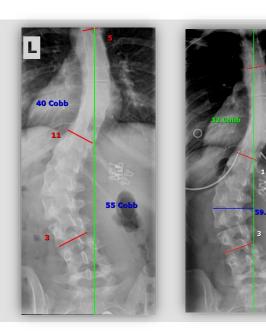
12 Month Follow-up

42.5° to 36° Thoracic No Pain Improved Posture/ Rib arch





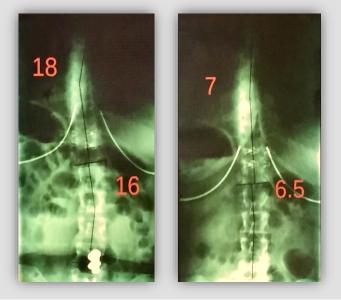
SCOLIOSISKC OUTCOMES



Age 18

6 Week Follow-up

40° to 32° Thoracic 55° to 42° Lumbar



Age 51

6 Week Follow-up

18° to 7° Thoracic 16 ° to 6.5° Lumbar No Pain







Patient Testimonials





I was diagnosed with scoliosis at 12 years old. I watched and waited while my curve progressed. It led to pain, insecurity, and a postural deformity in my back. My orthopedic doctor told me that it was best to just live with it and I did for over 20 years, but I never gave up looking for help. Finally, at 38 years old I was searching online and found ScoliosisKC. Dr. Nick changed my life with this rehab based scoliosis treatment program. My pain was eliminated, postural deformity reduced, and confidence restored. Thank you Dr. Nick for changing my life! - Marce

Dr. Nick and his staff are amazing! I recently completed their full CLEAR scoliosis program and received top-notch care and service. To anyone who is considering their program, the treatments do take a lot of dedication but are totally worth it. If you're skeptical because of how the treatments look, don't be, they feel good! Their program has changed my life, not only have I seen improvement in my condition, my pain went from unbearable to almost nothing at all. I'm still doing physical therapy at home and I'll continue to do so as long as it continues to help me feel like a normal human being. I feel blessed that I found Dr. Nick because he is fully dedicated and passionate about helping his patients. I will continue to recommend him and look forward to my son being able to have Dr. Nick on his side as he grows up! - Gabby







Please REVIEW US! Dr. Nick identified my scoliosis when I went in with back pain. I did the non-surgical therapeutic program during the summer of 2014. The results were extraordinary for me. Although it was hard work, all my pain vanished. Dr. Nick spent a lot of time explaining every step and is a highly personable provider. His staff is outstanding, too. I highly recommend at least a serious consideration of this therapy option if you have scoliosis. - Tracy

I've suffered from scoliosis my whole life, however, growing up I was unaware I had scoliosis. I suffered a lot of lower back pain and pain shooting down my legs when I was younger. And as I got older and by the time I started care with Dr. Nick, my scoliosis pain transferred to my neck and shoulders and eventually a perpetual migraine. It was about a year ago that I did about 8 weeks of treatment with him, I was out of pain and experienced a huge boost of energy after 2 weeks and I have had little to no problems since then. Thank you Dr. Nick for changing my life, you have been a massive answer to my prayers!! - Grace



You are only as **STRONG** as you allow yourself to be; **NEVER** get discouraged, **NEVER** give up because consistency & dedication is the key to **SUCCESS**.



Dr. Nick Weddle

ScoliosisKC

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HOPE Just a Few Degrees Away.