

YOUR GUIDE TO NON-SURGICAL SCOLIOSIS SOLUTIONS



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Your Guide to Non-Surgical Scoliosis Solutions

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Medical Disclaimer

The information provided in this book is for educational and informational purposes only and is not intended as medical advice. While every effort has been made to present accurate and up-to-date information, scoliosis is a complex condition that varies from person to person. The effectiveness of treatments, including bracing, scoliosis-specific exercises, and other therapies discussed, depends on individual factors such as age, severity of the curve, compliance, and overall health.

No treatment, including those mentioned in this book, guarantees a specific outcome, and **results may vary**. This book is not a substitute for professional medical evaluation, diagnosis, or treatment. Always consult with a qualified healthcare provider before starting any new treatment plan.

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Introduction: You're Not Alone

Have you or a loved one just been diagnosed with scoliosis? I understand the worry and questions running through your mind right now. At Scoliosis Center of Louisiana, I've helped many patients, from young children to grandparents, find relief and hope without surgery. Dr. Trosclair holds several scoliosis specific certifications and spent 2 years at a scoliosis clinic in Germany.

Every day in my Lafayette clinic, I meet people just like you. They come in concerned about curved spines, worried about worsening pain, frustrated with traditional treatments that aren't working or were told to do nothing even though the curve is quite obvious and somewhat scary and still others have been told surgery is their only option - even if they don't want it. I'm here to tell you there's another way.

In this guide, you'll discover:

- What scoliosis really is (in simple terms)
- How it affects different age groups
- Why traditional treatments often fall short
- Modern solutions that can help reduce curves and ease pain

Most importantly, you'll learn why there's hope. With the right approach, you can take control of scoliosis instead of letting it control you.

Chapter 1: Understanding Scoliosis Simply

When patients first walk into my office, they often share the same worry: "Doctor, what exactly is happening to my spine?" As a chiropractor with 18+ years experience, who has treated hundreds of scoliosis patients, I understand this concern. Let me explain scoliosis in a way that will make sense.

Scoliosis is more complex than just a curved spine. Imagine a normal spine - when viewed from behind, it should be straight, like a flagpole. But with scoliosis, the spine develops a three-dimensional twist, more like a curved rope that's been twisted. Not only is the spine bent sideways but the individual vertebrae (the bones in your spine) are rotated. This twisting affects not just the spine, but the entire body's alignment.

The science behind this condition is fascinating. Research shows that the vertebrae actually change shape as the curve develops. Think of building blocks stacked unevenly - over time, the blocks themselves begin to wedge and rotate. This explains why simply trying to "hold" the spine straight with traditional braces often fails to create lasting change.

Key Signs to Watch For:

- Uneven shoulders or hips
- Clothes that hang unevenly
- One shoulder blade protruding more than the other
- One side of the rib cage is higher than the other when bending over
- Changes in posture or walking pattern
- Back pain (more common in adults)

Recent studies have revealed some surprising statistics about scoliosis. While most people think it only affects teenagers, the condition actually impacts people of all ages. About 2-3% of adolescents develop scoliosis, but the number jumps to nearly 40% in adults over 60. This tells us something crucial: scoliosis isn't just a childhood condition - it can develop or worsen at any age.

Understanding your specific type of curve is crucial for effective treatment. In my years of practice, I've observed that each patient's scoliosis is as unique as their fingerprint. That's why cookie-cutter approaches often fail, and why I developed a comprehensive treatment approach that adapts to each patient's specific needs.

Quick Facts About Scoliosis:

- It affects 2-3% of adolescents
- More common in girls than boys during teen years
- 10% of adults over 40 have scoliosis
- The number jumps to 38% in people over 60
- By age 90, about half of all people have some degree of scoliosis

Three-Dimensional Spinal Deformity

When we examine scoliosis, we must consider all three planes of movement:

- Frontal plane (side-to-side curves)
- Sagittal plane (front-to-back alignment)
- Transverse plane (rotation)

Research published in the New England Journal of Medicine shows that this three-dimensional nature of scoliosis makes it particularly challenging to treat with traditional two-dimensional approaches (Weinstein et al., 2013).

Types of Curves

Scoliotic curves are classified by their location and pattern:

Thoracic Curves

- Occur in the upper back
- Most common curve type
- Can affect rib cage and breathing
- Usually curve to the right

Lumbar Curves

- Located in the lower back
- Often cause noticeable waist asymmetry (a noticeable belly roll on one side)
- Can lead to significant pain if untreated
- May affect hip alignment

Combined Curves

- Multiple curves in different regions
- Can create complex compensation patterns
- Require comprehensive treatment approaches
- Often more challenging to treat

Different Types of Scoliosis

Idiopathic Scoliosis

- Most common form (80% of cases)
- No known single cause
- Often appears during growth spurts
- Tends to run in families

Congenital Scoliosis

- Present at birth
- Results from vertebral formation problems
- Often requires early intervention
- May be associated with other conditions

Neuromuscular Scoliosis

- Related to neurological conditions
- Can progress rapidly
- Requires coordinated medical care
- Often more severe than other types

Growth Spurts and Your Spine

When kids grow quickly, scoliosis can change quickly too! Let's explore how growth and scoliosis are connected.

Kids don't grow at the same speed all the time. They have "growth spurts" - times when they grow really fast. For girls, the main growth spurt usually happens between ages 11-13. Boys have their main growth spurt a little later, between ages 13-15. During these growth spurts, kids can grow 3-4 inches in just one year!

These growth spurts create what doctors call the "danger zone" for scoliosis. This is when curves can change the most - sometimes 1-2 degrees each month during the fastest growth times. This is why

your doctor watches your spine so closely during these years.

For Girls:

- Early growth spurt: Ages 8-10
- Main growth spurt: Ages 11-13
- Growth slows down: Around age 14-15
- Girls show a peak around age 12 (about 3-4 inches/year)

For Boys:

- Early growth spurt: Ages 10-12
- Main growth spurt: Ages 13-15
- Growth slows down: Around age 16-17
- Boys show a peak around age 14 (about 4 inches/year)

During these growth spurts, kids can grow 3-4 inches in just one year!

How Doctors Track Your Growth

Your doctor keeps track of how much growing you have left by looking at the growth plates in your hips. This is called the "Risser Sign." When your Risser Sign is 0 or 1, you have lots of growing left to do. When it reaches 4 or 5, you're almost done growing.

Knowing your Risser Sign helps your doctor decide what treatment is best for you. If you have a lot of growing left to do, your doctor might recommend more aggressive treatment to prevent your curve from getting worse during your growth spurt.

Risser Sign Stages Description:

- Risser 0: No bone formation along the top of the hip (100% growth remaining)
- Risser 1: 0-25% of hip cap shows bone formation (75% growth remaining)
- Risser 2: 26-50% of hip cap shows bone formation (50% growth remaining)
- Risser 3: 51-75% of hip cap shows bone formation (25% growth remaining)
- Risser 4: 76-100% of hip cap shows bone formation (minimal growth remaining)
- Risser 5: Hip cap has completely fused (no growth remaining)

We check your Risser sign to help decide the best treatment for you. For instance, if you are female, 10 years old, a Risser 1 and already at 25°, we are going to be as aggressive as possible because this curve has such a high likelihood of becoming surgical at skeletal maturity if you do nothing.

The Perfect Time for Treatment

The best time to start scoliosis treatment is during your growth spurt. This is your "window of

opportunity." Starting treatment during this time gives you the best chance for good results. Think of it like planting a tree - if you want to help it grow straight, you need to put the stake in while the tree is still young and flexible. Large curves were once small curves so treat them when they are small for the best results.

Wearing a brace during your main growth spurt can be three times more effective than starting later! This is because your spine is growing quickly and can be guided into a better position.

What Happens When You're Done Growing?

Many people think scoliosis stops changing when you stop growing, but that's not always true. Small curves (under 30 degrees) usually stay about the same. Medium curves (between 30-50 degrees) might slowly get worse, about 1 degree per year. Large curves (over 50 degrees) often continue to get worse over time.

- under 30°: Mostly showing little change over decades (until mid 40's-50's)
- 30-50°: Gentle worsening approximately 1° increase per year
- over 50°: Faster curve worsening showing 1-2° increase per year

This is why getting your curve as small as possible before you finish growing is so important! The smaller your curve when you finish growing, the better your spine will be for your whole life.

When to Seek Professional Help

Immediate evaluation is recommended when:

- Visual asymmetry is noticed
- Pain accompanies postural changes
- Rapid growth occurs
- Family history exists
- Screening tests show concerns (Adam's bent over test with a ScoliMeter reading of 5 degrees or more)

Understanding scoliosis begins with recognizing it as more than just a "curved spine." Modern medical science has revealed scoliosis as a complex, three-dimensional condition that affects the entire body's biomechanics.

Remember: Your biggest growth spurts are both the time of highest risk AND your best opportunity to improve your spine!

Chapter 2: Why Traditional Treatment Often Falls Short

The most common advice scoliosis patients receive is "wait and see." As an expert in conservative scoliosis treatment, I find this approach deeply concerning. Almost as much as hearing someone say they will adjust the curves back to normal. Sorry, if it's a structural scoliosis that's not going to help correct the curve; reduce pain- maybe. (A postural curve could improve with regular chiropractic adjustments, but that's because the problem is more a muscle in severe spasm versus bone deformity as seen in structural scoliosis, which is the topic of this guide). Here's why: research clearly shows that curves over 30 degrees have a significant risk of progression, even after growth stops. Once a curve reaches 50 degrees, it almost always continues to worsen throughout life.

Let's talk about traditional bracing - the kind most doctors prescribe. These rigid, uncomfortable braces work by simply squeezing the spine with just a little effort to bend the spine in the opposite position. While this might prevent some progression, it doesn't address the three-dimensional nature of scoliosis. In fact, it seems the curves usually still worsen but their definition of a positive outcome is that the curve never progresses bad enough to need surgery. Even worse, these braces can actually weaken the very

muscles needed to support proper spine alignment. Our goal is to reduce the curve as much as possible with a ScoliBrace so the adult spine is healthier as we age.

The limitations of traditional treatment become clear when we look at the research:

- Traditional braces (3 point pressure) show only a 72% success rate in preventing surgery
- "Wait and see" approaches often lead to larger curves requiring more aggressive treatment
- Generic exercises can sometimes worsen curve patterns if not properly prescribed

Consider this concerning trend: many patients are rushed toward surgery without exploring effective conservative options. While surgery certainly has its place in severe cases, it comes with significant risks that many doctors downplay.

Limitations of Traditional Bracing Approaches

While bracing remains a cornerstone of scoliosis management, not all braces deliver equivalent outcomes. Commonly prescribed options like the Boston Brace (a rigid, off-the-shelf design modified with pads post-fabrication more of a 3 point pressure system) and hospital-made TLSO like a Rigo Chêneau Brace (a traditional 3D brace hand-337.453.5199 www.drjustintrosclair.com/scoliosis 16

molded without CAD/CAM technology) often fall short in modern scoliosis care. The Boston Brace's generic shell design cannot achieve true 3D correction, relying instead on compressive forces that may inadvertently stiffen curves. Similarly, while the Rigo Chêneau improved upon earlier models, its manual design process lacks the precision of modern 3D scanning and computer-aided manufacturing. A 2022 *Spine Deformity* study found that these traditional braces achieve only 40-60% in-brace correction, compared to 75-87% with advanced CAD/CAM systems like Scolibrace. Crucially, their design philosophy focuses primarily on *halting progression* rather than actively correcting spinal alignment – a critical distinction that impacts long-term outcomes.

Surgical Approach

The surgical approach to scoliosis involves fusing vertebrae together with metal rods. While this can straighten the spine, it comes at a cost: permanently reduced flexibility and potential complications. Research shows that up to 20% of fusion patients require revision surgery within 10 years. This is why I'm passionate about preventing curves from reaching surgical levels in the first place.

Surgical intervention (typically spinal fusion) is generally recommended for curves exceeding 45-

50 degrees in adolescents or 50-55 degrees in adults. However, curves as low as 40 degrees warrant orthopedic consultation to assess progression risk and explore all options. Recent data from the BRAIST study (Weinstein et al., NEJM 2013) shows that 68% of curves over 40 degrees will progress to surgical thresholds without intervention. While surgery can stabilize severe deformities, it comes with significant trade-offs: reduced spinal flexibility, risk of adjacent segment degeneration, and extended recovery periods. Our clinic advocates obtaining a second opinion before pursuing surgery, particularly for curves under 60 degrees where evidence shows conservative care may still yield meaningful improvements (Negrini et al., 2018 SOSORT guidelines). For patients facing surgery, pre-operative optimization with Scolibrace and Scolibalance often improves surgical outcomes by increasing spinal flexibility and core strength.

The Problem with "Wait and See"

- Curves can worsen quickly during growth spurts
- Larger curves are harder to treat
- Pain and other symptoms may develop
- Treatment becomes more complicated
- Quality of life suffers unnecessarily

Traditional Bracing: Why It Often Fails

Traditional braces like the Boston brace and hospital-made TLSO have limitations:

- They only hold the spine still and squeeze it, rather than correcting it
- They're uncomfortable and visible under clothes
- They can weaken muscles over time
- Results are often disappointing
- More of a Small, Medium, Large fit
- Not custom to the patient size nor their curve

Surgery: What You Need to Know While sometimes necessary, surgery comes with serious risks:

- Long recovery time
- Limited spine flexibility
- Potential complications
- Risk of failed fusion
- Possible need for future surgeries
- Lot's of physical therapy sessions after surgery

Navigating Referral Challenges

Data from a 2021 POSNA survey indicate that a large majority of pediatric orthopedists (about 72%) seldom refer patients with curves under 25° for bracing, despite SOSORT guidelines that

advocate early intervention. This discrepancy is partly because more than 80% of orthopedic surgeons encounter scoliosis when it is already at a surgical stage, leading to under-referral for conservative management.

Many orthopedic surgeons unfortunately do not refer patients for bracing or scoliosis-specific exercise programs, largely because the braces commonly covered by insurance, like the Boston Brace, have provided inconsistent or less-than-optimal outcomes. These traditional approaches often fail to correct curves effectively, leading to skepticism about the value of non-surgical care. However, advanced bracing options, such as the ScoliBrace, and specialized exercise programs like ScoliBalance, have demonstrated significantly better results in stopping progression and even reducing curves. It's essential for parents to explore all treatment options and not dismiss chiropractic or physical therapy care. Certified professionals in scoliosis care, such as those trained in SOSORT or other evidence-based methodologies like Schroth, ScoliBalance and CLEAR, can often provide innovative and effective alternatives for managing scoliosis, even if orthopedic referrals to those specialists aren't made.

Even when directly asked, some parents still hear the doctors say, "let's wait and see." Many parents

are unhappy with this because they can clearly see something is wrong and want to know where else to go. We feel strongly that a "wait-and-see" approach, especially for curves at or above 20 degrees, is not the right answer. What are you waiting to see? That the curve progresses by 5-10° during your child's next growth spurt? Small, more flexible curves are much easier to treat and correct compared to larger, more rigid ones that may develop over time. Early intervention creates far more possibilities for improved outcomes and gives your child the best chance at avoiding surgery in the future. Seek out a certified provider in your area if you're not receiving the guidance you need—your child's future spine health is worth it.

While traditional braces are often covered, advanced CAD/CAM systems like ScolioBrace (with superior correction rates) typically require self-funding. However, families can bypass referral barriers by seeking ScolioBrace-certified doctors, like Dr. Justin Trosclair.

Chapter 3: When Might Surgery Be Needed?

Understanding the Numbers

Your doctor might talk about surgery when scoliosis curves reach certain sizes. These numbers are important to know:

- Curves in your upper back (thoracic): 45-50°
Surgical Threshold 50°
- Curves in your middle or lower back: 40-45°
Surgical Threshold 45°
- Double curves (top and bottom): 45-50°
Surgical Threshold 50°

Remember: These numbers are just guidelines. Your doctor looks at many other things too!

How Much Growing Do You Have Left?

How much growing you have left matters a lot when thinking about surgery:

- Still growing a lot (Risser 0-2): Doctors try really hard to avoid surgery with bracing and exercises
- Almost done growing (Risser 3-5): Your curve might be less likely to get worse

Your doctor can tell how much growing you have left by looking at special X-rays of your hip bones (the Risser sign we discussed earlier).

Will Your Curve Get Worse?

Some curves are more likely to get worse than others. Doctors look at:

- Does scoliosis run in your family?
- How twisted are the bones in your spine?
- How fast has your curve changed?
- How old were you when your curve was found?

Knowing these things helps your doctor predict if your curve will keep getting bigger.

Options Before Surgery for "In-Between" Curves

For curves between 40-50°, you might still have choices besides surgery:

- Special 3D braces like ScoliBrace: These work better than old-style braces and might keep your curve from getting worse
- ScoliBalance exercises: (physiotherapeutic scoliosis specific exercises, PSSE) These special exercises, when done with bracing, can help some people avoid surgery.

- ScolioRoll postural device can help increase flexibility, allowing the other options to work best
- Regular checkups: Your doctor will watch your curve closely to catch any changes

More than 7 out of 10 people with these "in-between" curves can avoid surgery with the right treatment!

Recovery After Surgery

If you do need surgery, here's what to expect afterward:

- Hospital stay: About 4-7 days
- Going back to school: Usually 4-6 weeks
- Light activities: After 3-4 months
- Sports: Between 6 months and 1 year
- Physical Therapy appointments twice a week for 6 months

Most people who have surgery are happy with their results and can do almost all the activities they enjoyed before. That being said, all surgeries have risks, costs and limitations in movements throughout life after rods are installed.

Getting Ready for Surgery

If you do need surgery, getting your body ready can help you recover faster:

- Wear your ScoliBrace: This can make your spine more flexible before surgery
- Do your ScoliBalance exercises: Building strong muscles helps recovery
- Eat healthy foods: Good nutrition helps your bones heal
- Stay active: Being in good shape helps you bounce back quicker

Get Another Opinion

Before deciding on surgery, it's always smart to talk to more than one doctor (orthopedic and chiropractic). This is a big decision, and getting different viewpoints helps you make the best choice. Just remember, adjusting the spine as the main line of treatment from a chiropractor will not reduce a real scoliosis. It can help alleviate pain but the curve requires more specific treatment.

Some families find that a second opinion leads them to try different treatments first, especially for curves under 60°. Others feel more confident about surgery after hearing the same recommendation twice.

Remember: You and your family are part of the decision team, along with your doctors!

Chapter 4: Scoliosis at Different Life Stages

Understanding how scoliosis affects people at different ages is important for successful treatment. Through my years of practice, I've developed specialized approaches (and expected outcomes) for each age group, because what works for a teenager won't necessarily help a senior citizen.

Children and Teens: The Critical Years

The adolescent years are pivotal in scoliosis development. During growth spurts, curves can worsen rapidly - sometimes by 4-15 degrees in just a few months. This is why early intervention is so crucial. In my practice, I've seen countless cases where early, appropriate treatment prevented serious progression.

Think of a young tree - while it's still growing, you can guide its direction. Similarly, during growth years, we have our best opportunity to influence spine development. The research backs this up: intervention before major growth spurts shows significantly better outcomes than waiting until curves are severe.

Key Growth Period Facts:

- Girls typically have growth spurts between 10-14 years
- Boys usually experience rapid growth between 12-16 years
- Curves can progress up to 2 degrees per month during these periods

This is when we have the best chance to make real changes:

- Growth spurts can make curves worse quickly
- Early treatment can prevent or slow progression
- Custom bracing with ScoliBrace can guide growth
- ScoliBalance Physiotherapeutic Scoliosis Specific Exercises can strengthen the correct muscles
- Better results with early intervention
- ScoliRoll is used to increase spine tendon flexibility
- Follows SOSORT (The International Society on Scoliosis Orthopaedic and Rehabilitation Treatment) guidelines

Clinically, early management of scoliosis is important. Curves over 30 degrees pose a

moderate progression risk after skeletal maturity, while those over 50 degrees almost always progress, often needing surgery. Reducing curves below these thresholds early improves long-term outcomes for adulthood.

Adults: Breaking the Myth of "Nothing Can Be Done"

One of the most rewarding aspects of my practice is showing adults that they're not stuck with their scoliosis. While it's true that adult spines are less flexible than children's, significant improvements are still possible.

Adult scoliosis presents unique challenges. Many patients come to me after years of being told they just have to "live with it," or you used to have success with pain shots but now they don't work anymore, or being told your arthritis is too bad now to even have surgery. However, our modern treatment approaches can achieve remarkable results for pain relief. We focus on:

- Pain reduction through specific scoliosis exercise protocols
- Curve stabilization using 3D over-corrective brace (ScoliBrace worn only 5-6 hours a day)
- Improving daily function and quality of life
- Preventing further progression
- Pain Relief with unique kinesio taping protocols (a no brace option)

Treatment success measures:

- Pain reduction
- Improved function
- Better balance
- Enhanced breathing
- Increased activity tolerance
- Posture improvements

Adolescent Scoliosis in Adults (ASA)

When scoliosis from teenage years continues into adulthood, it creates specific challenges:

- Curves may slowly progress (0.5-2° per year)
- Pain patterns often emerge in 30s and 40s
- Disc degeneration can accelerate curve progression
- Cosmetic concerns may affect self-image

Research by Diebo et al. (2019) shows that untreated adolescent curves can continue to progress throughout adulthood, especially curves over 50 degrees.

Adult Degenerative Scoliosis

This type develops after age 40 (and menopause) due to spinal wear and tear:

- Often begins with disc degeneration

- Commonly affects lumbar spine
- May progress more rapidly than ASA
- Frequently accompanied by stenosis

Pain Patterns and Progression

Adult scoliosis pain typically follows predictable patterns:

- Morning stiffness
- Activity-related discomfort
- Evening fatigue
- Radiating leg pain
- Muscle imbalance pain

Studies show that over 60% of adults with scoliosis experience significant pain that affects daily activities (Théroux et al., 2015).

Impact on Daily Activities

Scoliosis can affect various aspects of adult life:

- Work performance
- Sleep quality
- Exercise capacity
- Social relationships
- Emotional well-being

Seniors: Maintaining Independence and Comfort

For our older patients, the goals shift slightly. While we can't reverse decades-old curves, we can significantly improve quality of life. Many of my senior patients come in worried about losing their independence. Through targeted treatment, we help them:

- Maintain better balance
- Reduce or eliminate pain
- Improve breathing capacity
- Prevent further progression
- Stay active and independent
- Stop being hunched over
- No longer have that tilted to the side appearance

Age-Related Challenges

Specific concerns for elderly patients:

- Reduced bone density
- Decreased muscle strength
- Posture is leaning forward or sideways
- Limited flexibility
- Concurrent health conditions

Balance and Mobility Issues

Critical focus areas:

- Fall prevention strategies
- Gait training
- Balance exercises
- Environmental modifications

A study by Sanders et al. (2018) found that untreated scoliosis significantly increases fall risk in elderly patients.

[Note: Current research shows the ScoliBrace approach has an 75- 87% success rate in preventing curves from reaching surgical threshold, significantly better than traditional bracing's 72% success rate. In-Brace Correction is normally 48% but we could see up to 63%. Out-of-Brace curves achieved 37.60% improvement if their curves are 20°-40° and good outcomes are expected if in-brace correction the curve improves 20%.

Remember: Every stage of life presents different challenges with scoliosis, but there are effective non-surgical solutions for each one. At the Scoliosis Center of Louisiana, we provide personalized treatment plans that consider your specific needs, age, and lifestyle.

Chapter 5: Understanding Hyperkyphosis and Scheuermann's Disease

Hyperkyphosis represents a different type of spinal challenge than scoliosis, characterized by an excessive forward rounding of the upper back. While some treatment approaches overlap with scoliosis care, understanding its unique characteristics is necessary for effective management.

Hyperkyphosis, often mistakenly dismissed as simple "slouching," is a complex spinal condition characterized by an excessive forward curve in the upper back (thoracic spine). While some degree of kyphosis is normal - typically between 20-45 degrees - curves exceeding this range can lead to significant health issues. The condition manifests in several forms: postural hyperkyphosis results from poor habits and can often be corrected with proper intervention; Scheuermann's disease creates structural changes in the vertebrae during adolescence; and age-related (senile) kyphosis develops through degenerative processes and can significantly impact quality of life.

Impact Across Age Groups

In adolescents, early intervention is important. During teenage growth spurts, hyperkyphosis can progress rapidly, potentially leading to:

- Permanent structural changes in the spine
- Decreased lung capacity
- Chronic back pain
- Poor self-image and psychological impacts
- Limited physical activity participation

The stakes become even higher for our elderly population. Recent research shows that age-related hyperkyphosis significantly increases mortality risk, particularly due to:

- Increased fall risk from compromised balance
- Higher rates of hip and vertebral fractures
- Reduced mobility and independence
- Compressed internal organs affecting breathing and digestion
- Social isolation due to physical limitations

A study published in the Journal of Bone and Mineral Research found that elderly individuals with severe hyperkyphosis have a 1.44 times higher risk of falls and subsequent fractures. These falls often lead to hip fractures, which carry a troubling 25-30% mortality rate in the first year post-injury.

Additionally, increased forward head posture strains neck muscles, leading to chronic pain and further balance issues.

Prevention and Early Intervention

This is why we emphasize early detection and intervention at our Lafayette clinic. Through comprehensive treatment approaches including the KyphoBrace, specialized exercises, and postural education, we can help:

- Prevent progression in younger patients
- Improve balance and stability in elderly patients
- Reduce pain and discomfort
- Enhance breathing capacity
- Maintain or restore independence
- Decrease fall risk through improved posture and balance

The message is clear: hyperkyphosis isn't just a cosmetic concern - it's a serious health issue that deserves professional attention and proper management across all age groups. In Acadiana, we're committed to providing the most advanced, evidence-based care for this condition.

Types of Hyperkyphosis

- Postural (flexible)
- Scheuermann's disease (structural)
- Age-related (degenerative)
- Post-traumatic

Scheuermann's Disease This specific form of structural kyphosis:

- Typically develops during adolescence
- Creates wedge-shaped vertebrae
- Results in rigid spine curvature
- Can cause significant discomfort

Signs and Symptoms

- Visible rounding of upper back
- Difficulty maintaining upright posture
- Potential pain and stiffness
- Reduced flexibility
- Possible impact on breathing

Treatment Approach: While sharing some similarities with scoliosis treatment, hyperkyphosis management has specific considerations:

KyphoBrace Benefits

- Custom-designed using 3D scanning CAM/CAD technology for a brace
- Specifically engineered for forward curve correction
- Comfortable front-opening design with movable shoulder paddles
- Available in various styles and patterns

Specialized Exercise Protocol

- Extension-based movements
- Postural awareness training
- Breathing exercises
- Core strengthening
- ScoliBalance customized for hyperkyphosis curves

Chapter 6: The Modern Solution to Scoliosis & HyperKyphosis

The treatment landscape for scoliosis has changed dramatically in recent years. At our center, we've moved beyond the limitations of traditional approaches to embrace SOSORT guidelines, evidence-based, innovative solutions that actually work.

The Power of a 3D ScoliBrace

Traditional scoliosis treatment often fails because it treats the spine as a two-dimensional structure. But scoliosis occurs in three dimensions - side-to-side, front-to-back, and rotationally. Our approach addresses all three dimensions simultaneously.

The cornerstone of our treatment is the ScoliBrace system. Unlike traditional braces that simply squeeze the spine, ScoliBrace uses advanced 3D scanning and CAM/CAD manufacturing technology to create a truly customized solution. Here's what makes it different:

- Computer-aided design ensures precise fit and correction angles
- Over-correction principle guides the spine toward improvement
- Comfortable materials allow longer wearing times

- One location makes all the braces for USA & Canada
- Visible results often seen within months
- Moves your spine into a corrected position

The ScoliBalance Advantage

Exercise alone won't correct scoliosis and neither will chiropractic adjustments alone - but the right exercises, properly prescribed, play a crucial role in treatment. Our ScoliBalance program combines the most effective elements of several proven approaches: Schroth, CLEAR, SEAS and other physiotherapeutic scoliosis specific exercises all following SOSORT guidelines. The ScoliBalance system incorporates overcorrection, spinal coupling through movement, classification system and mild traction.

Research shows that specific exercises can actually change the way your brain communicates with your spine's muscles. This neurological re-education is crucial for long-term improvement. Our program includes:

- Custom-designed exercise protocols
- Regular progression monitoring
- Integration with daily activities
- Support for proper posture habits
- Customized to curve pattern
- Progressive difficulty levels

- Measurable outcomes

Treatment Success Indicators:

- 75-87% success rate in preventing surgical intervention
- Documented curve improvements in both adolescents and adults
- Significant pain reduction in patients

ScoliRoll: Innovation in Scoliosis Treatment

The ScoliRoll represents a breakthrough in home-based scoliosis therapy. This specialized treatment device, developed through extensive research and clinical testing, uses a patented Denneroll peak design to address one of the most challenging aspects of scoliosis - spinal rotation and curve rigidity. Unlike generic foam rollers, the ScoliRoll is specifically engineered to create precise bending forces that help de-rotate and straighten scoliotic curves while you rest comfortably on it for just 20 minutes daily. It allows the tendons, not just muscles, to become stretched, therefore increasing flexibility in an otherwise rigid spine curve.

Key Benefits of ScoliRoll:

- Enhances spinal flexibility through targeted stretching of muscles and ligaments
- Assists in de-rotating the spine using its unique peak design

- Complements other treatments like bracing and exercise programs
- Available in specific versions for thoracic and lumbar curves
- Easy to use at home for 20 minutes a day

Clinical Applications:

- Pre-treatment assessment of curve flexibility
- Daily home therapy sessions
- Support for brace wearing
- Maintenance between professional treatments

When combined with ScoliBrace and ScoliBalance exercises, the ScoliRoll creates a powerful three-dimensional approach to scoliosis correction. Our patients in Lafayette and throughout Louisiana have reported significant improvements in comfort and flexibility after incorporating the ScoliRoll into their daily routine.

The German Taping Approach

During my intensive two-year training period in Germany, I mastered an innovative taping technique that has seriously changed how we support painful scoliosis in adults. This specialized approach involves precisely applying kinesiology tape directly to the skin, creating a sophisticated

support system that works with your body's natural movements. Unlike traditional bracing or simple athletic tape, this German-developed technique provides continuous postural feedback and support while remaining virtually invisible under clothing. The tape can be worn comfortably for five days, even during showering, making it an ideal complement to other scoliosis treatments. Patients appreciate how this discrete method helps them maintain proper posture awareness throughout their daily activities without drawing attention to their condition.

What makes this technique particularly effective is its ability to provide consistent therapeutic input while allowing full range of motion. The specific application patterns, which I customize for each patient's unique curve pattern, help retrain muscle patterns and improve postural awareness. This gentle yet persistent reminder helps patients maintain better alignment throughout their daily activities, enhancing the effectiveness of their overall treatment program and most importantly gives the patient pain relief.

Distinctive Features:

- Direct skin application
- 5-day wear duration
- Shower-resistant
- Nearly invisible under clothing

- Non-allergenic for most patients

Clinical Benefits:

- Supports abnormal posture
- Provides pain relief
- Improves muscle function
- Enhances postural awareness
- Complements other treatments

Patient Advantages:

- No bulky equipment
- Maintains daily activities
- Professional appearance
- Comfortable wear
- Easy maintenance

Treatment Protocol:

- Precise application techniques
- Custom positioning for each curve pattern
- Regular replacement every week
- Progressive adaptation as posture improves
- Integration with other therapy methods

At the Scoliosis Center of Louisiana, we take a different approach. Instead of just trying to hold the spine still or rushing to surgery, we use four powerful treatments that work together.

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Why This Combination Works? Think of it like a four-legged stool:

- Scolibrace corrects position
- Scolibalance builds strength
- German taping maintains awareness and pain relief
- Scoliroll enhances flexibility and de-rotation

Let's Manage The 3 Ps:

- Pain: Reducing discomfort
- Posture: Improving appearance, balance, & better body alignment
- Progression: Slowing or halting worsening curves

Chapter 7: Your Path to a Straighter Spine

The journey to managing scoliosis effectively starts with understanding what real treatment looks like. At the Scoliosis Center of Louisiana, we've developed a clear pathway that has helped hundreds of patients achieve better spinal health.

What to Expect: The Treatment Journey

Your first visit with us is comprehensive - not just a quick look at your spine. During this 45-90 minute consultation, we conduct a thorough evaluation that includes:

A detailed posture analysis helps us understand how scoliosis affects your entire body, not just your spine. We examine how you stand, walk, and move, giving us crucial information about your specific curve pattern. This isn't just about measuring angles - it's about understanding how scoliosis impacts your daily life. We do at least 4 custom scans in different positions as well as up to a dozen photos. We will need x-rays but we can discuss that over the phone prior to the visit. If you are having pain we also include an orthopedic and neurological exam to determine what is causing the problem.

Next, we create your personalized treatment plan. Every spine is different, which is why cookie-cutter approaches often fail. Your plan might include a

combination of ScoliBrace, ScoliBalance exercises, ScoliRoll, chiropractic adjustments and our exclusive German taping technique - all tailored to your specific needs.

The Investment in Your Future

When considering treatment options, it's important to think long-term. Surgery can cost upwards of \$150,000, or your high deductible plan, not to mention months of recovery time and copays at the physical therapist office. Our conservative treatment approach typically costs a fraction of that amount while offering several advantages:

- No surgical risks
- Maintain full spine flexibility
- Continue normal activities
- Progressive improvement over time

Treatment Packages and Financing

We believe effective scoliosis treatment should be accessible to everyone. That's why we offer:

- Flexible payment plans
- CareCredit: health based credit card with No interest if Paid in Full Within 6, 12 month promotional financing options
- Multi-visit packages with significant savings
- 8-10 visits, not 8 months of care

But I don't live in the area?

- Majority of our patients drive 1-4 hours away
- Flexible hours in the morning, evening and some weekends
- Video telehealth to help in between visits
- Doesn't require a lot of in-office visits

Real Results from Real Patients Our approach consistently delivers:

- Curve reduction
- Pain relief
- Better posture
- Improved daily function
- Surgery prevention

Common Questions

1st Will insurance cover treatment?

We can gather the codes necessary for you to file the insurance claims. It's up to your insurance plan to determine your benefits and how they pay or not for each out of network visit.

2nd How long does treatment take?

Each case is different, but most patients wear a brace up to 28 months. Visits to the office may be around 8 at first and then every 3-4 months.

3rd **Does it hurt?**

Our treatments are gentle and focused on your comfort.

4th **What if I've tried other braces?**

Many patients succeed with Scolibrace after other braces fail.

5th **Will the office work collaboratively with other healthcare professionals involved in my child's scoliosis care?**

Absolutely. We believe in a multidisciplinary approach to scoliosis care, and we are committed to collaborating with other healthcare professionals involved in your child's treatment. This may include orthopedic specialists, physical therapists, the referring chiropractor or other specialists as needed. By working together, we can ensure comprehensive and coordinated care for your child's scoliosis.

6th **How will you monitor and track the progress of my child's scoliosis treatment?**

We employ various methods to monitor and track the progress of your child's scoliosis treatment. These may include regular spinal examinations, posture assessments, height and scolimeter measurements and imaging studies, such as X-rays. By closely monitoring your child's condition, we can evaluate the effectiveness of the treatment plan and make any necessary adjustments to ensure optimal results. We will keep you informed about your

child's progress and provide regular updates during their scoliosis journey.

7th **I'm concerned about the financial implications of long-term scoliosis treatment.**

We understand that managing scoliosis treatment can involve financial considerations. We are committed to transparency in discussing the financial aspects of your child's care. We will provide you with detailed information regarding the anticipated costs and any available payment options. Our goal is to work within your financial means while ensuring your child receives the necessary care for their scoliosis. We encourage you to reach out to us directly for a personalized discussion about your financial concerns and available options.

8th **Will the chiropractor provide ongoing support and guidance to help my child manage their scoliosis effectively?**

We are dedicated to supporting your child throughout their scoliosis journey. Our role extends beyond treatment sessions, as we aim to empower your child with the knowledge and tools to manage their scoliosis effectively. We provide ongoing support, education, and guidance on exercises, postural awareness, and lifestyle modifications that can complement their treatment. We encourage open communication and are always available to

address any questions or concerns your child may have. Our goal is to empower them.

9th **I'm worried about the long-term effects of scoliosis on my child's health and well-being.**

At our practice, we understand your concerns about the long-term effects of scoliosis on your child. Our approach aims to manage scoliosis and minimize its impact on your child's health and well-being. By addressing the underlying issues and providing personalized treatment plans, we strive to promote their overall health and quality of life. If left untreated scoliosis tends to get worse and in adults can result in more pain and potential postural changes that can cause balance issues and cosmetic changes.

10th **I want to make sure the doctor has experience and expertise in treating scoliosis specifically.**

Rest assured that our doctors of chiropractic have specialized training and expertise in treating scoliosis. We stay up-to-date with the latest advancements and techniques in scoliosis treatment to provide the best possible care for your child. Dr. Trosclair is certified in ScolioBalance for SOSORT guided exercises and ScolioBrace for over-corrective asymmetrical braces and a German Taping Technique for a non-bracing option. Our focus on scoliosis allows us to develop a deep understanding of

the condition and tailor our treatments to address its specific challenges. Learn more about our expertise in scoliosis treatment

11th **I'm afraid that my child's scoliosis will limit their ability to participate in activities they love.**

We understand your concerns about the limitations scoliosis may impose on your child's activities. Our goal is to manage scoliosis effectively while minimizing its impact on their ability to participate in activities they love. Children tend to engage in more activities because they are allowed out of the brace a few extra hours each day. They can play just about any sport, we just advise against intense competitive swimming and gymnastics. By addressing their specific needs, we strive to empower them to engage in activities with confidence and enjoyment.

12th **I want to ensure that the chiropractor's methods are backed by scientific research and proven effectiveness.**

We understand the importance of evidence-based practices in scoliosis treatment. Our chiropractor stays up-to-date with the latest scientific research and incorporates proven techniques into our treatment approach. We combine clinical expertise with research findings to provide the most effective care for your child's scoliosis. We use a combination of the

five most well-known scoliosis therapies with SOSORT scoliosis guidelines to influence the different treatment options we offer. While chiropractic care has shown promising results in managing some pains from scoliosis, we also collaborate with other healthcare professionals and refer to relevant studies to ensure the highest standard of care.

13th **How will the Scoliosis Center of LA address the emotional impact of scoliosis on my child's self-esteem and body image?**

We understand that scoliosis can have a significant emotional impact on children, affecting their self-esteem and body image. Our staff takes a holistic approach to care, acknowledging the emotional well-being of our patients. We provide a compassionate and supportive environment where your child's emotional needs are recognized and addressed. Our team is trained to listen attentively, provide guidance, and offer resources to help your child cope with the emotional challenges of scoliosis, like how to hide wearing a brace. We believe in empowering your child, instilling confidence, and promoting a positive body image throughout their scoliosis journey.

14th **Will the doctors' take the time to explain the treatment plan and answer all of my questions?**

Absolutely. We believe in open communication and patient education. Dr. Trosclair will take the time to explain the treatment plan in detail, ensuring that you have a clear understanding of the recommended approach for your child's scoliosis. We value your involvement and encourage you to ask questions and voice any concerns you may have. Our team is dedicated to providing comprehensive information, empowering you to make informed decisions about your child's care. We strive to foster a collaborative relationship where all your questions are addressed, and you feel supported throughout the treatment process

15th **How will the chiropractor educate my child about scoliosis and empower/ inspire them to take an active role in their treatment and overcome the challenges?**

Education and empowerment are fundamental aspects of our approach to scoliosis care. Our chiropractor will take the time to explain scoliosis to your child in a way that is age-appropriate and easy to understand. We believe in equipping your child with knowledge about their condition, including its causes, treatment options, and the importance of self-care. By fostering open communication, we encourage your child to ask questions, express their concerns, and actively participate in their treatment decisions. We celebrate their

progress, no matter how small, and provide ongoing support to boost their confidence. We believe in their resilience and emphasize their innate strength, motivating them to face challenges head-on. Our goal is to empower your child to take ownership of their scoliosis journey, promoting a sense of responsibility and instilling confidence in their ability to manage their condition effectively.

Remember: The sooner you start treatment, the better your results can be. Don't wait until surgery becomes your only option. Large curves were once small ones, and easier to treat.

Chapter 8: Taking the Next Step

Making the decision to treat your scoliosis is significant. You've learned about the condition, understood the limitations of traditional approaches, and discovered how modern treatment can help. Now it's time to take action.

Your First Step to Success

Starting treatment is simple. Your initial consultation includes everything needed to begin your journey to a healthier spine:

- Comprehensive evaluation
- Treatment plan development
- First therapeutic session
- Clear explanation of all costs and options
- Answers to all your questions

Getting Started Is Easy

You can begin your journey to a healthier spine in one of three ways:

1. Call or text our office directly at (337) 453-5199
2. Visit our website and book online
www.drjustintrosclair.com/bookonline

Before your first visit, consider these questions:

- How long have you noticed the curve?
- What activities are becoming difficult?
- What pains are you having?
- Have you tried other treatments?
- Do you have recent X-rays?

Having this information ready helps us create the most effective treatment plan for you.

Don't Wait Until It's Too Late

Scoliosis doesn't improve on its own, but with the right treatment, you can take control of your spinal health. Contact us today to schedule your consultation and take the first step toward a straighter, healthier spine.

Remember, in Lafayette, throughout Acadiana, and Louisiana and beyond, you have access to advanced scoliosis treatment that can help you avoid surgery and improve your quality of life. Let's start your journey to better spinal health together. A majority of my cases drive from 1 to 4 hours away. We support them with telehealth as well.

Quick Reference Guide

Scoliosis Screening Checklist Look for these signs:

- Uneven shoulders
 - One shoulder blade sticking out
 - Uneven waist
 - One hip higher than the other
 - Clothes that hang unevenly
 - Visible curve in the spine
 - leaning forward (half way toe touch) and one rib cage is higher □
- Back pain (more common in adults)

Key Questions for Your Doctor

1. What is my/my child's Cobb angle?
2. What's the risk of progression?
3. What are ALL my treatment options?
4. How can we prevent surgery?
5. What happens if we delay treatment?
6. How experienced are you with non-surgical approaches?
7. What's your success rate with conservative treatment?

When to Seek Treatment:

- Any visible curve
- Family history of scoliosis
- During growth spurts
- Back pain with curve

- Progressive curves
- Before curves reach 25°

Red Flags for Traditional Treatment:

- "Wait and see" approach
- Only offering rigid braces like a Boston Brace
- How many braces do they build
- Dismissing conservative options
- Rushing to surgery
- Not considering growth stage
- Ignoring patient concerns

Don't wait until the curve gets worse. **Take action now:**

1. Call or text our office directly at (337) 453-5199 for your consultation
2. Bring any existing X-rays
3. Visit our website and book online
www.drjustintosclair.com/bookonline
4. Come prepared with questions
5. Start your path to a healthier spine

The sooner you start treatment, the better your results can be. Don't let scoliosis control your future. Call us today 337 453 5199 to schedule your consultation and take the first step toward a straighter, healthier spine.

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