

PERSONAL
MESSAGE

Understanding the Role of Physical Therapy

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When we treat a person with a back problem, our primary focus is on helping this person return to their highest level of function, both at home and at work with the least amount of discomfort – all the while keeping them safe from the risk of re-injury. This is a tall order to fulfill at times. It also requires that we address a lot of different aspects of the person's life in order to arm them with the tools necessary to keep them safe from future problems.

The more traditional model of Physical Therapy addresses the injury directly. Much of the time addressing the injury itself will only partially relieve a patient of their symptoms. It is important to look beyond the injury site and identify causes for the injury in the first place. At Avante Physical Therapy we are highly trained and effective in treating the patients using manual techniques, including joint mobilizations, soft tissue mobilizations, neural mobilizations and core stabilization rehabilitation. Modalities such as heat, ice, ultrasound and electrical stimulation are just a few of the more common methods applied to the muscles, which help enhance the manual techniques applied.

Decreasing pain is important in order to interrupt the pain cycle and therefore the exacerbation of symptoms. If this can be interrupted sufficiently, it not only will help the person be more comfortable, but will also reduce the secondary complications from an injury such as muscle spasms and compensation.

There are a vast number of exercise approaches and techniques available to Physical Therapists (PTs) for correcting the underlying causes of back pain. There is no one right way. It is a matter of finding out what works for that person and his body to get the desired results. We particularly like having PTs with different skills working together so that we have a wide variety of skills to



Geert Audiens and Heather Reeves
—Owners, Avante Physical Therapy

“Education is the number one means for reducing back injuries. Physical Therapists have a primary role in this”

use as necessary.

After reducing the pain and correcting the underlying problems, we then progress into the realm of improving the patient's overall fitness level and functional level. This may involve retraining of daily living activities, including work and home functions. This includes educating the patient on the factors that may contribute to their back injuries and how to avoid them in the future. This may include correct lifting techniques, or how to set up their work station to reduce the strain on overuse injuries, which may require the on-site visit of an ergonomist at the patient's work site. Once the patient has the understanding of his/her aggravating factors with regard to their “weakened area,” they will be more confident and independent in handling any future episodes or problems.

Education is the number one means for reducing back injuries. Physical Therapists have a primary role in this because of their knowledge of how the body works and what causes injuries. The education they can provide can include ways on how to reduce pain and discomfort, how to avoid the typical injuries which are found on the job, how to correct body mechanics, how to correct lifting techniques, how to set up one's work station, how to make one physically fit for their required job function, etc., etc. The list is endless.

BACK PAIN

RISK FACTORS THAT CAUSE BACK PAIN AND WHAT TO DO ABOUT THEM

By Gaynor Hale, Physical Therapist



Back problems strike people in all walks of life. It is very common to have back problems. In fact 8 out of every 10 people will be laid up with back pain at some point in their life. Back problems are the second leading reason people miss work. The first is the common cold.

Contrary to popular belief, back problems are not just a problem for heavy laborers. Actually, people with desk jobs and other more sedentary types of work have a slightly higher incidence of back problems than those with heavy physical labor. Being very strong definitely gives you an advantage but does not protect you if you abuse your back. Likewise, having a light, easy job does not protect you either. A back injury can severely cripple you, your family, your finances and your happiness. It can tear your life apart.

Are back injuries, then, inevitable? Not necessarily. There is a lot you can do about it to prevent it from happening or to reduce the damage if it does occur and to speed your recovery.

The key is to reduce the risk factors that cause injury in the first place. What are those risk factors?

1. POOR POSTURE

Poor posture is one of the main reasons that injuries occur. This means that the spine's normal curves are either increased (i.e. a swayback posture or a forward head posture) or decreased and flattened out (i.e. your low back rounding out or flattening when you sit). Either way there is an increase in the strain on the muscles, ligaments and joints. The ideal scene for the spine is to have the normal, natural curves. In this position there is the least amount of strain on your back.

There is more pressure in your lower spine when



you are sitting than standing or lying down. Also, people tend to slump their lower back (round it out or decrease the natural inward curve) when they are sitting. This is very stressful to the muscles as well as the joints.

What to do about it: When you sit, place a small towel roll at your low back to help support and maintain the natural curve. Specific exercises can help you change your posture. Your Physical Therapist is an expert in exercises and can help you with the correct exercises and the correct sequence to improve your posture.

2. FORWARD BENDING

When you bend forward you are putting all your back muscles in a stretched out position and that decreases their strength. Therefore, you can very easily strain the muscles by requiring them to lift a weight, or just lifting your upper body from a bent over position. Because this position weakens the muscles, everything in your back is at risk of injury because the muscles protect other structures. The way they protect everything is by pulling you out of harmful positions. So don't put your back at a disadvantage and then ask it to do heavy work!

What to do about it: When trying to lift objects or reach below your waist, bend your hips and knees, keeping the natural curves locked in your spine. (Follow the Tips and Tricks on the following page.) This not only is safer but also increases your lifting strength. Your Physical

Keep a positive attitude about your job and homelife. Studies show that persons who are unhappy at work or home tend to have more back problems and take longer to recover than persons who have a positive attitude.

Therapist is highly trained in the proper way to lift and position your body for any task you have to do. Have your PT show you how to do it safely.

3. DECREASED FLEXIBILITY

When your muscles and joints are tight and inflexible they can change the way you walk, sit, stand and move. When you try to move to do a task, tight muscles can be strained. The lack of flexibility in the muscles of your back and legs is a major risk factor for back injury.

What you can do about it: Stretching is the key! Stretching exercises also need to be done properly so that you don't cause injury to the muscles—i.e. “bouncing” to stretch tight muscles can cause tiny tears in them that make them sore and tighter. Consult your Physical Therapist to make sure you are doing the ones that are correct for you and that you are doing them safely.

4. POOR PHYSICAL FITNESS

A physically fit person is able to work more, play harder, and maintain their energy level longer than those who are not fit. Poorly conditioned muscles do not have the strength, flexibility or endurance that is needed to work properly and that sets you up for injury. Remember, brute strength does not necessarily mean good conditioning. Your ability to reduce the risks of back injury are directly linked to your overall state of physical fitness.

What you can do about it: Get on a general fitness program or recreational activity that is appropriate for you. Your Physical Therapist can guide you with this. Remember, “weekend warriors” (those who sit behind a desk all week then try to move mountains on the weekends), end up getting hurt. Get yourself fit for whatever activity you will be doing. Don't take chances.

5. ACCIDENTS

Some accidents are unavoidable. So if you should have an accident, you have less risk of serious injury if you are physically conditioned, use proper body posture and lifting techniques and have taken every effort to reduce the aggravations to your back throughout

Tips and Tricks

TIPS AND TRICKS FOR SAFE LIFTING:

When lifting objects, back injuries can be avoided if you:

- 1. Keep a wide base of support.** Spread your feet apart with one foot slightly ahead of the other to make yourself more stable.
- 2. Keep the object close to you.** The farther the object is from you the more pressure there is on your low back.
- 3. Bend your knees and hips.** To pick up or set down objects you need to get your hands down to that level. Don't bend over at the waist, bend your hips and knees.
- 4. Maintain your low back curve.** This is the key! Lock in the spine so that you maintain that slightly inward curve in your low back.
- 5. Do not twist or bend sideways.** Face the object you are picking up or working on. If you must turn to change your direction, pivot on your feet.



- 6. Push rather than pull.** Pushing is easier for your back. Brace your hands on the object, lock your natural curve in your spine and slightly bend your knees. This will give you lots of pushing power—safely!



- 7. Use a step stool.** If you must reach over shoulder level, use a step stool to get up closer to the object to avoid more strain on the low back. It's not the weight of the object but the position of your back that causes injuries.

- 8. Get help.** If the object is too heavy or the size or shape is too awkward, ask for help or use some equipment designed to assist you.

the day.

What you can do about it: Keep yourself physically fit, use safe lifting techniques and posture, use proper tools, don't take short-cuts or try to “muscle through” a job when you have machinery to do it for you and set up your workstation in such a way that you eliminate unnecessary motions and strain such as bending and twisting. Here is where your Physical Therapist can be of tremendous assistance. They are trained to help fit your workstation to you in ways that reduce the stress

and strain.

6. POOR WORK HABITS

Using unsafe posture, especially while lifting is a very poor and dangerous work habit. Motions that are repeated over and over in the same direction are also very hazardous. Habits can be changed and it is well worth the time and effort.

What you can do about it: Consult your Physical Therapist. They are the experts in helping you spot poor, unsafe work habits and they know what to do about

FAQ

Why are back problems so hard to get rid of?

Back injuries don't usually happen "overnight". They are an accumulation of aggravations and abuses from lifetime habits that add up over the years. So if you keep doing things the same way you will continually aggravate and damage your back regardless of how good the treatment is. Bad habits can also prevent you from recovering.

What are the most damaging "habits" we can do to our backs?

The two most harmful things you can do to your back are bending and twisting. These motions not only cause irreparable damage to the muscles, ligaments, joints and the discs in your back but they also put your back in a weakened position. Unfortunately most people will bend over from the waist or twist their spine and then try to lift things. By doing so, you put your back in a weakened position and then ask it to do heavy work and then wonder why it hurts.

How do you avoid bending and twisting?

You can avoid bending by locking your spine into position (with slight natural inward curve in the low back) and then bending with your hips and knees. This is the position the weight-lifters use to lift heavy weights. They use it because it is the safest and strongest position for their backs. You can avoid the twisting by making sure you are facing your task. In other words, have your shoulders and

hips facing the same direction. If you need to change directions, pivot on your feet. Shoes are cheaper to replace than your back!

I work as a grocery store clerk and have to stand at the cash register for long periods of time. This makes my back ache a lot by the end of the day. What can I do?

Find a small box or a low step stool to place your foot on. This will allow one leg to bend at the hip and knee and will reduce the strain on your low back. You can change feet as frequently as you like. Try different heights and see what is the most comfortable for you.

I have been out of work for 4 weeks with a back injury. My doctor is sending me back to work on "light duty". Does this mean I should have a desk job?

Sitting for long periods of time can actually be harmful to the low back. There is more pressure per square inch on your low back than there is standing or lying down. If you have to take a sitting job you can minimize the aggravation to your low back by using a chair that is properly fit for you and your work station and by getting up out of the chair every 15 to 20 minutes and doing a gentle back-bend. It would be a better option to have a job that allows you to sit for short periods of time as well as walk around. Some companies allow workers to "job-share". With this they can swap jobs with another worker at some time during the day or during the week so that their tasks are varied and they can change positions more often.

Do you need to see a Physical Therapist for your back pain? Take this simple test...

Simply place a check mark in the appropriate box. Once you are done, calculate the number of YESes and look at the results.

| YES | NO | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | I wake up in the morning with pain in my back. |
| <input type="checkbox"/> | <input type="checkbox"/> | I get pain in my back when I walk. |
| <input type="checkbox"/> | <input type="checkbox"/> | I cannot bend over easily without pain. |
| <input type="checkbox"/> | <input type="checkbox"/> | My neck goes out at least twice a year. |
| <input type="checkbox"/> | <input type="checkbox"/> | I get a sharp pain from my low back down the back of my leg. |
| <input type="checkbox"/> | <input type="checkbox"/> | Exercising is too painful for my back. |
| <input type="checkbox"/> | <input type="checkbox"/> | I do not do any exercises for my back during the day. |
| <input type="checkbox"/> | <input type="checkbox"/> | I have to sit at a desk all day and my chair makes my back ache. |
| <input type="checkbox"/> | <input type="checkbox"/> | I am overweight and can not easily bend over to grab something. |
| <input type="checkbox"/> | <input type="checkbox"/> | My back surgery has gotten rid of most of my pain but I still can't do my job yet. |
| <input type="checkbox"/> | <input type="checkbox"/> | My back hurts everytime I lift one of my legs. |
| <input type="checkbox"/> | <input type="checkbox"/> | My back keeps me awake at night. |

Results:

Less than 3 Yes

You're doing fine. Exercising may help keep your back in check.

Between 3 and 6 Yes

Physical Therapy could definitely be an option for you.

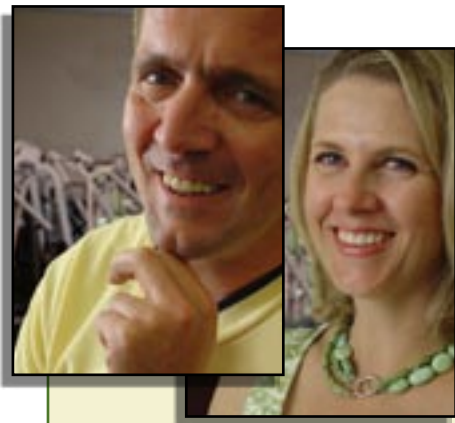
Between 6 and 10

We would advise you to see a doctor to get a better diagnosis, but Physical Therapy is definitely an option.



Featured Physical Therapists

Geert Audiens, PT and Heather Reeves, PT



It's now been 4 years since the opening of our baby, Avante Physical Therapy! What an adventure it's been!

Geert (pronounced "Heert") and Heather met while working together in an outpatient spine clinic in Lumberton, NC. Heather moved to the Cary area in September, 2000 after her husband was offered a position with IBM. Geert decided to make the move shortly thereafter, after his wife started the PA program at Duke University. It was at that time that Geert and Heather took the plunge and decided to open a clinic. It was their vision to practice physical therapy the way it should be done. No more would they be governed by insurance companies or

corporate politics, regarding how they would treat their patients. Patients would receive well deserved one-on-one time with their therapists, leading to a rapid recovery and reduction in their symptoms.

Geert trained at the University of Brussels in Belgium, and graduated in 1985. Heather trained at the University of Cape Town in South Africa and graduated in 1993. Both Geert and Heather received further certifications and training in manual therapy and orthopedics over the years. Together they have applied their knowledge and experience and have built a well respected, quality physical therapy practice. Geert and Heather personally provide ongoing manual therapy training for their staff, both on and off site. This ensures that they maintain the highest quality care for their patients, and has put them at the forefront of manual physical therapy clinics in North Carolina.

Avante Physical Therapy has grown by 400% since March 2001, and now has patients traveling from all areas within 3 hours of the facility to receive their expert treatments and advice. It continues to be Geert and Heather's dream to expand their practice, in order to provide high quality physical therapy services to more patients in the surrounding areas. They continue to be motivated in the clinic and are dedicated to their staff and patients. They have built a strong team of professionals, all of whom are an integral part of Avante Physical Therapy.

SUCCESSSES

What patients are saying...



always greeted with a smile and a pleasant "Hi, Brenda". —BM

Thanks so much for figuring out my body and giving me the appropriate treatment and exercises. Special thanks to Jannette, you are the best physical therapist I have ever had. —SD

I felt I learned a great deal about how to maintain the improvement I gained during my therapy sessions.

The therapists are very knowledgeable, skillful, very professional, yet friendly. They motivate you to



continue your treatments to completion. They are very encouraging. —KC

I am impressed with the professionalism of the entire Avante staff. I am glad to say that the results

of my treatments are beyond my expectations. —BM

Geert and the office staff took great care of me. I was impressed by the level of attention, and will definitely recommend Avante Physical Therapy to my friends. Thanks. ---TG

You facility is great and your staff is awesome. —CNS

Avante Physical Therapy is an extremely professional, well-run and competent center. It saved me from surgery. Need I say more?! Thank you very much. —NM

Thank you so much! Geert was great and I feel so much better! I will definitely refer people to Avante Physical Therapy. —KG

Thanks for making a painful problem such a "pleasure" to work through. I always looked forward to coming to receive treatments. I was



Tired of having **BACK PAIN?**



Come and
Visit Us for a

FREE CONSULTATION

Find out if Physical Therapy can help you ease the pain and help you gain a new outlook on life. Call us at:

Cary (919) 463-9443

Apex (919) 367-7890

www.avantept.com



WHAT'S NEW AT AVANTE?

The Avante Physical Therapy Apex clinic location celebrated its 1st Anniversary on 3/31/05 with after-hours drinks, balloons, food, and staff story-telling. The clinic moved to its new location last year just across the street from the original satellite clinic in the Apex Medical Park.

"We love our new location," says Jennifer Christie, Clinic Director. "We have the opportunity to work with some great neighbors and have developed strong new programs during our growth this year".

Avante Physical Therapy will begin hosting free "Helping You Help Yourself" workshops beginning in June, including practical self help fitness and wellness tips. Topics will focus on specialty orthopedic interests for all age levels. The first workshop will highlight "Non-Surgical Management of Low Back Pain".



WE CARE ABOUT YOU!

Call us today for a free consultation at

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Apex (919) 367-7890

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