The #1 Guide That's Saved Thousands of people, Thousands of Hours and Over \$1,000,000 in Wasted MD Visits and Costly Testing

SOLVE YOUR DIZZINESS ONCE AND FOR ALL!

Do you get dizzy getting out of bed? – Do you get dizzy when you move your head quickly? – Do you get nauseous in a moving car or boat?

Do you get migraines throughout the day?

IF YOU ANSWERED YES TO ANY OF THESE QUESTIONS THIS GUIDE IS FOR YOU!



WHAT IS VERTIGO, DIZZINESS, AND BPPV?

Who can benefit from BreakThrough's Vestibular Plan?

- Do you get dizzy getting out of bed?
- Do you get dizzy when you move your head quickly?
- Do you get nauseous in a moving car or boat?
- Do you get migraines throughout the day?

If the answer to any of these questions is YES, then you will benefit from BreakThrough's Vestibular Plan.

Why is this important to you?

Dizziness and migraines end up interfering with your day to day, even from the second you open your eyes in the morning. This can make exercising, driving, playing with your kids, or even walking quite difficult. Wouldn't it be nice if you didn't have to worry about being dizzy getting out of bed in the morning?

What should you do about it?

- Contact your Primary Care Physician (PCP)
- Contact a ENT (Ears, Nose, and Throat) physician
- Contact your Physical Therapist (PT)

Common Forms/Causes of Dizziness Include:

- Vertigo, Benign Paroxysmal Positional Vertigo (BPPV)
- Dizziness following a fall
- Migraines, Meniere's Disease, Vestibular Neuritis
- Head trauma and concussions
- Motion sensitivity

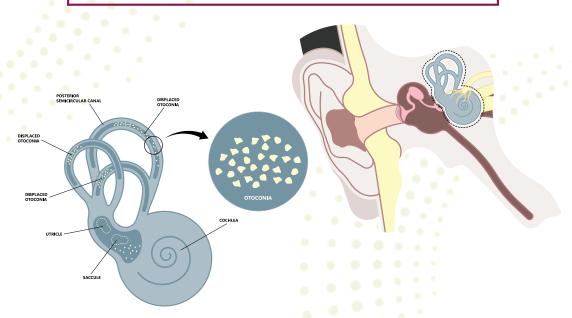
Vertigo, Benign Paroxysmal Positional Vertigo (BPPV), and Dizziness, what really do all of these mean?

Vertigo is a true phenomenon where there is hallucination that the outside world is moving or spinning. This may last for seconds, minutes or hours. **Dizziness** can be described as an internal or chronic sensation or feeling inside of the head. **BPPV** is a type, and most common, cause of vertigo that is usually triggered by specific changes in head position.

Why is this important?

Vertigo has to do with our Vestibular System, which is part of our inner ear, and is important with keeping our equilibrium and balance.

BPPV: BENIGN PAROXYSMAL VERTIGO



Before getting too detailed into the various types, it is important to teach you a bit about the human equilibrium system as a whole. The human equilibrium system is complex and requires accurate information from several sensory modalities including vestibular, visual and somatosensory input.

The **vestibular system** provides us with an internal reference, informing the brain where the head is in space, its direction of movement and acceleration. It contributes up to two-thirds of the information needed to maintain proper balance.

The **visual system** involves our eyes telling the brain about the world outside, and our peripheral vision provides information about motion.

The **somatosensory system** involves muscle receptors in the ankle and lower leg to provide external references from contact with different types of surfaces, like grass or sand. Muscle proprioceptors in the neck also contribute information about the head position.

The **central nervous system** integrates sensory input from the outside world and produces an appropriate body motor control response.

Regardless of all those giant words, the comparison of these various inputs allow a person to determine if they are moving, or if the world is moving, and if these systems are working appropriately.

When they aren't working appropriately, that creates dizziness!

Does any of this sound familiar? If yes, **DO NOT IGNORE THOSE SYMPTOMS**. Contact your PCP, ENT, or PT as soon as possible to get treatment started.

<u>Click here</u> for a brief questionnaire that will help you think through your symptoms a bit and help us better serve you.

<u>Click here</u> for a more comprehensive questionnaire.

See how a Physical Therapist can help you (click here)







Here are some Support Groups to get even more help. (click here for the list)

HOW DO PHYSICAL THERAPISTS TREAT VERTIGO?

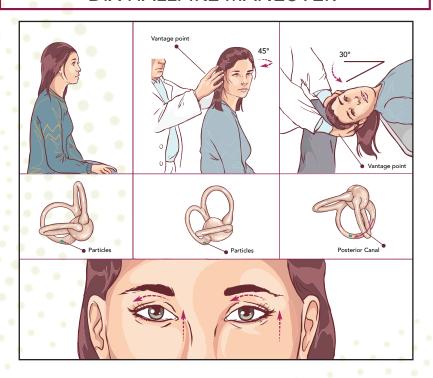
Since there are **many different types of vertigo**, there are many different types of treatment. We will give you a few examples, but please do not attempt unless you consult with a medical professional as they may actually cause symptoms to worsen if not prescribed correctly.

One of the most common diagnoses treated with physical therapy is Benign Paroxysmal Positional Vertigo (BPPV). **BPPV** has to do with the three semicircular canals within our inner ears. There are small crystals within these canals that can dislodge and trigger the vertigo that is felt when getting out of bed, for example.

Hx/Px Factor	Peripheral	Central
Onset	Sudden onset	Can be either gradual or sudden
Duration	Severe	Mild, subtle
Nystagmus directionality	Unidirectional Usually horizontal, sometimes rotary	Vertical Nystagmus is a RED FLAG Can be multi-directional or down beating
Effect of Head Position (e.g. Dix-Hallpike Maneuver)	Worsened by certain positions (Elicited by Dix-Hallpike)	Not really better or worse with various positions
Any Associated Symptoms?	Can also have tinnitus NO NEUROLOGICAL SYMPTOMS ASSOCIATED	Usually associated with other neurological symptoms

A physical therapist will place the client in certain head and body positions to determine which canal these crystals may be stuck in based on specific eye movements, commonly known as the **Dix-Hallpike maneuver**. Then, another specific movement will be done to get these crystals back where they belong, commonly known as the **Epley maneuver**. Although these are the most common, they are not the only ones that can be done, it all depends on the thorough assessment that needs to be done first.

DIX HALLPIKE MANEUVER

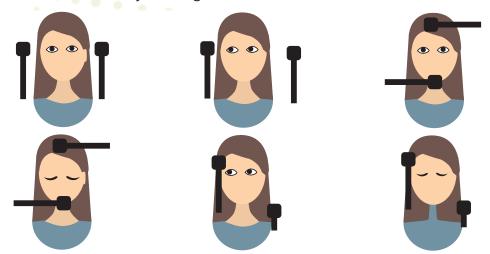


EPLEY MANEUVER



Getting in to see your Physical Therapist as soon as possible can save you time, money, frustration and discomfort. They will be able to evaluate and treat your symptoms when you come in on day 1, which can significantly improve or eliminate your symptoms in one visit. However, there may be other factors that play into your dizziness, where you will need other types of treatment to continue to reduce your dizziness such as **gaze stability** and **habituation** exercises, to allow proper activity modification. You may have other comorbidities, where seeing your Primary Care Physician or ENT is just as important for proper medication management.

Gaze stability is another common treatment for the Vestibular Oculomotor Reflex, which involves how the neck and eye muscles move together to promote coordination and strength. These will typically involve certain cards or visual targets, performed in sitting or standing, to properly train the neck and eye timing of movement.

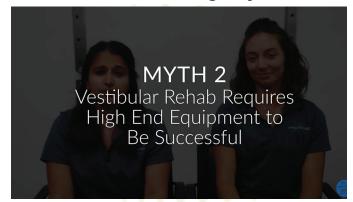


No matter what type of vertigo or dizziness that may be going on, habituation exercises are the main focus. **Habituation exercises** are certain exercises that involve specific head and eye motions at certain distances, speed, and movement to properly train the vestibular system. This is an exercise for the brain and the eye muscles, just like squats or bicep curls are an exercise for the legs and arms.

Click here to see exercise videos with Deepali and Rachel.



Click here to see the Vertigo Myth 2 & 4



Here is what our clients are talking about...



Patient testimonial - Jose

Why is this important to you?

Dizziness may end up interfering from the second you open your eyes in the morning and roll out of bed. This can make walking, unloading the dishwasher, playing with your grandkids, or even driving quite difficult. Wouldn't it be nice if you didn't have to worry about being dizzy throughout your day?

FALLS AND DIZZINESS

Dizziness and falls can happen to anybody, at any age. However, prevalence of vertigo and dizziness in people aged more than 65 years continues to climb, rising to 50% beyond 85 years, and due to the aging of the world population, the number of patients is rapidly increasing.

Most people fall while doing usual activities, and 40% - 50% occur in presence of environmental hazards such as curbs, rugs, or pets. Falls are multi-factorial in nature, yet there are some **common risk factors:**

- Normal aging process: 25% 35% of those older than 65 fall each year.
- Different medical conditions: Low blood pressure, vascular insufficiency or stenosis, peripheral neuropathy, Diabetes, vertigo, or concussion.
- Visual difficulties: cataracts, glaucoma, macular degeneration.
- Neurological conditions: stroke, Parkinson's Disease, cerebellar degeneration.
- Medications: certain prescriptions and even Tylenol PM.

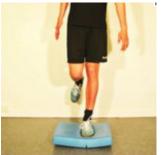


All of the factors listed above can contribute to falls by causing drowsiness, poor balance, dizziness, postural hypotension (dizziness with sitting up or standing up), or even just quick head movements can trigger vertigo leading to fall.

If somebody has a fall, **it is important to figure out why this fall happened**. Regardless of age, medication, or history, there are some general important exercises to perform to improve balance and reduce the risk of falls.

- Postural stability exercises improve balance by encouraging the development of balance strategies, especially when incorporating head movements, or on different surfaces. These are important to work on and continue as once there is an initial fall, there tends to be mobility restrictions and loss of independence, an increase in the fear of falling, which then predicts subsequent falls.
- Ankle and hip strategy work to increase muscle strength and reaction to getting off balance. If you are able to improve your strength and plan for when you are feeling off balance, you may be able to stop the fall.
- **Functional tasks** to reduce injury risk. Learning how to reduce objects in the house that may cause falls, and the safest way to get on and off the ground, and so much more!









Make sure to keep the described risk factors in mind and pay attention to make sure nothing worsens to hopefully reduce the potential of falling. However, the best way to prevent a fall is to work on it, and can be easily done by working with a trained Physical Therapist.

Want more information? Click here.

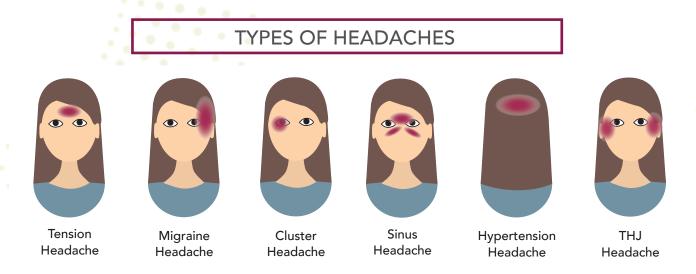


Why is this important to you?

Dizziness can end up interfering with your day to day, even from the second you get out of bed. This can make exercising, driving, playing with your kids, or even walking quite difficult. Wouldn't it be nice if you didn't have to worry about being dizzy while getting ready for your day to start?

MIGRAINES, MENIERE'S, AND MORE... AND WHY WOMEN ARE MORE SUSCEPTIBLE

A **migraine headache** is usually an intense, throbbing pain on one, or sometimes, both sides of the head, usually preceding with an aura or sensations, such as flashing lights or zigzag lines. Most people with migraine headaches feel the pain in the temples or behind one eye or ear, although any part of the head can be involved. Migraines can occur any time of the day, though it often starts in the morning. The pain can last a few hours or up to one or two days. Most of the time, migraines are not a threat to your overall health, however migraine attacks can interfere with your day-to-day life.



Unfortunately there is not too much research about what causes migraines, but some things are more common in people who have them:

- Most often, migraines affect people between the ages of 15 and 55.
- About 3 out of 4 people who have migraines are **women**.
- Women tend to report **more painful and longer lasting** headaches and more symptoms, such as nausea and vomiting.
- Most people have a **family history** of migraine or of disabling headache.

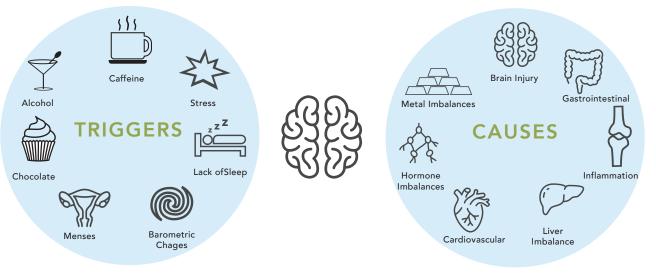
The good news is that migraines often become less severe and less frequent with age. Obviously you don't just want to wait for them to go away however. So, take a look below for some common triggers and causes of migraines that may be avoided.

Migraine Triggering factors:

- **Anxiety.** When you're anxious as a result of stress, you are more likely to eat unhealthy foods, have a disrupted sleep schedule and engage in other behaviors that can perpetuate headaches.
- **Glare.** The brightness from your computer screen, sunlight or overhead lights can make your head hurt.
- **Noise.** Sound—whether loud and repetitive or continuous, low-level noise—can cause headache pain.
- **Eating and sleeping patterns.** Being hungry can cause headaches, as can lack of sleep.
- **Medication.** Certain prescriptions can trigger headaches.
- **Concussion.** Headache is a common symptom of a concussion.
- **Physical activity.** Overexertion can cause swelling of blood vessels in your head, neck and scalp, giving you a headache.
- Lack of physical activity. A sedentary lifestyle can cause headaches.
- **Posture.** Sitting up straight keeps blood flowing and can help you avoid headaches.
- **Food sensitivities.** Certain types of foods and drinks release neurotransmitters that can lead to headaches. Common triggers include aspartame, caffeine, chocolate, alcohol* and aged cheeses like Parmesan.
- **Dehydration**. A lack of fluids can cause several types of headaches, so it's important to stay hydrated and drink plenty of water.

CURING A MIGRAINE:

The easiest way to cure a migraine is to understand the cause. A trigger creates the migraine. The cause makes the trigger manifest into a migraine.



A trigger creates a migraine.

The cause is what makes the trigger manifest into a migraine.

People worldwide suffer from migraines

50%

More than 50% of migraine sufferers are undiagnosed

Source: migrainestrong.com

If you can't avoid some of the triggers, or are still getting migraines, try some of these easy tricks to reduce the nausea and pain you may be getting.

MIGRAINE NAUSEA RELIEF			
Accupuncture Wrist Bands	Essential Oils: Temples,Tummy, Under Nose, Inhale	Prescription Medication -Like Reglan, Zofran & Suppositories	
Allay Lamp	Ginger: Fresh, Capsules, Chews, Ale or Tea	Shift Focus: Creative Activities, Guided Meditation App	
Apply Ice to your Head & Neck	Hydrate Slowly - Warm Water, Mineral Water, Sports Drinks	Sit Upright Rather Than Laying Down	
Apply Heat & Light Pressure to your Tummy	Isopropyl Alcohol Pads - Inhale	Warm Foods: Broth, Soup Bland Food: Toast, Rice, Banana	
CBD Oils, Rub & Soaks	Migraine Roller Balls	Vomit	
Cool Moving Air	Over the Counter Medication & Vitamin B6	Deep Slow Breathing & Limited Movement	
	Peppermint - Candy, Tea, Essential Oil		

Source: migrainestrong.com

If those don't work, consider some of these tips **here!**

Meniere's Disease is an excess amount of fluid and pressure in the endolymphatic system which is a membranous structure in the inner ear. The symptoms tend to include recurrent episodes of vertigo accompanied by fluctuating hearing loss and tinnitus, or ringing in the ears.

STAGES OF MENIERE'S DISEASE

EARLY	MIDDLE	LATE
Sudden unpredictable vertigo	Vertigo attacks less severe	Less frequent vertigo
Hearing loss & Tinnitus	Hearing loss and tinnitus often become worse	Hearing loss and tinnitus become worse
Hearing and full sensation returns between attacks	Periods of remission	Problems with balance

Meniere's Disease can involve abnormal vitamin D and hormonal levels. This can be more prevalent in menopausal women due to fluctuations in hormones. It is important to work with you physical therapist, however also to see your MD

Vestibular Neuritis is inflammation of the vestibular ganglia or nerve, causing intense vertigo for days and loss of postural control for weeks or even months. This can end up taking you out for even 2 days, causing poor balance, headaches, and vomiting.

We know this is all a little complicated, so hopefully this graph helps!

PERIPHERAL VERTIGO

	TIME COURSE	CLINICAL CHARACTERISTICS
BENIGN PAROXYSMAL POSITIONAL VERTIGO	Brief (seconds) but recurrent episodes	Reproducible with certain movements
VESTIBULAR NEURITIS	Continuous episodes, lasting days	May (or may not) have a viral problem
MENIERE'S DISEASE	Recurrent episodes lasting minutes to hours	Spontaneous. May have hypoacusia or tinnitus, although initially may be absent

Here is what our clients are saying...



Patient testimonial - David

A few helpful articles:

Effects of Vestibular Rehabilitation in the Management of a Vestibular Migraine
National Library of Medicine

Effects of vestibular rehabilitation in the management of patients with and without vestibular migraine

National Library of Medicine

Ménière's Disease: Causes, Symptoms & Support Strategies

DrJockers.com

Here are some **Support Groups** to get even more help.

FALLS WITH HEAD TRAUMA AND CONCUSSIONS, AND WHAT COMES WITH IT

1.7 million individuals sustain a Traumatic Brain Injury (TBI) each year in the United States

The leading causes of TBI are:

- Falls 28%
- Motor vehicle accidents 20%
- Struck by or against an object 19%
- Assaults 11%





It is important to know that **30-65% of people following a TBI or concussion, will suffer symptoms of dizziness at some point during their recovery**. TBIs may result in a wide variety of primary direct impairments and are the result of the neurological damage caused by the traumatic event. This can present as motor, sensory, cognitive, speech, behavioral, and vestibular impairments.

Following a TBI **individuals are subject to a wide variety of indirect impairments**, such as depression. This is why it is important to constantly monitor symptoms and continue with exercises even after the initial injury.

The following are general recommendations when interacting with persons with brain injury:

- Establish and maintain a consistent daily routine
- Never discuss the patient's condition with someone else when the patient can hear you, even if you think he cannot understand
- Treat the patient at an age-appropriate level
- Respect the patient's likes and dislikes about food, clothing, music, entertainment, etc.
- Keep in mind these likes and dislikes may have changed
- Avoid telling the patient "you'll soon be well". Such remarks result in disillusionment
- Do not answer for the patient if they are capable of speaking for themselves
- Keep instructions consistent. Talk about the same things in the same way using the same words
- Try to include the patient in conversation and family affairs
- Don't overestimate the patient's capability to understand what is said
- Don't act like you understand when you don't

Although all of this may be new territory, it is important to treat the circumstances with familiar actions. Although there have been changes, not everything has changed, and it is important to continue with certain similarities to allow proper functioning for all affected.

Those grappling with sudden changes following a TBI can be of the individual and of the family. It is important to understand the difficulties of all parties, and provide the appropriate support.

How can a Physical Therapist help?

Physical Therapists are trained to evaluate and treat vestibular disorders, symptoms following a TBI or concussion, and balance training. This means a Physical Therapist will be able to work **with their patient/client as a whole to allow** proper recovery and rehabilitation following a concussion or TBI.

Vestibular therapy is one of the most effective treatments for balance disorders after a concussion.

It is essential to visit a specialist before trying vestibular therapy for concussion.

They can help identify the source of your problems and direct you towards the best treatment methods.

And finally, for vestibular therapy to work properly, **you must follow the program at home every day**. Doing so will help activate neuroplasticity and reduce the time you must wait before returning to your normal life.

The first goal of vestibular rehabilitation is simple: to get you to have vision that is clear and stable during head movement! To accomplish that, we use a process called gaze stabilization. Many patients experience a near-instant improvement in their balance once they've gone through gaze stabilization exercises. After that, we'll move on to exercises that involve more movement and balance.

For example, after activating the individual sides or canals that need work with gaze stabilization exercises, patients then perform full body exercises like catching a ball while standing on a wobbly surface or walking in a Figure 8 pattern around obstacles all while keeping your eyes focused on a point (called the Infinity Walk). We also teach patients good breathing techniques. Proper breathing keeps your body well oxygenated and facilitates recovery.

Some people have vision problems but no vestibular issues; others have vestibular issues without vision problems. Many have both. The exact struggles you have determine what kind of therapy you get and how many sessions you'll need.

After working with a therapist, you'll be given exercises to do at home as well. These will continue to reinforce the improvements you make at each appointment.



Here is what our clients are saying...

Patient concussion testimonial - Rachel

MOTION SENSITIVITY (SEA-SICK OR CAR-SICK) TRAINING

About 1 in 3 people are considered highly susceptible to motion sickness. The main symptom of motion sickness is typically nausea. Although the exact neurobiological cause of motion sickness is unclear, many countermeasures have been developed to prevent and alleviate this condition.

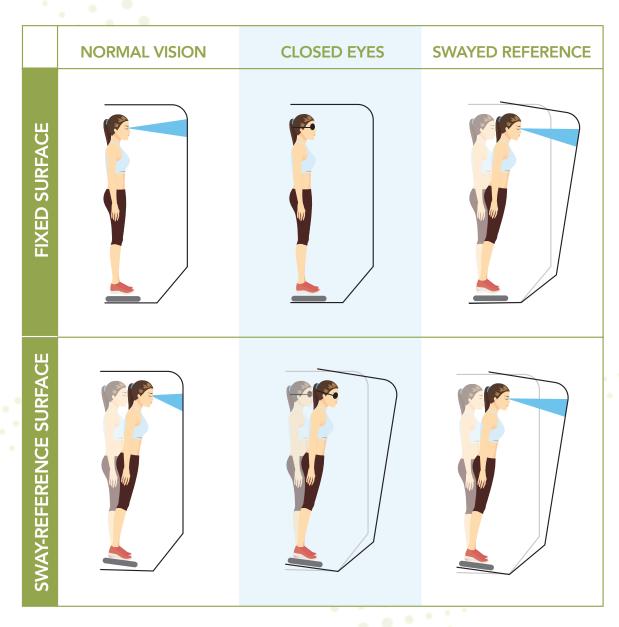
Motion sensitivity can create nausea or dizziness symptoms, which similarly can occur when standing at the edge of a large cliff, being on top of a tall building, being in small spaces, riding in a car, or being on a boat. If these symptoms persist without being treated, it can lead to vertigo.

Motion sensitivity is completely treatable with habituation and adaptation exercises. Although they are not necessarily fun, as they do provoke nausea and dizziness, over increased time, they can reduce or abolish any motion sensitivity symptoms.

One type of treatment that is commonly done with your Physical Therapist is **habituation** and adaptation exercises. These can involve certain head movements, body movement, standing or sitting on soft surfaces, or reaching and moving quickly in multiple directions.

What an assessment with your Physical Therapist looks like:

- The client will be put through the Somatosensory Organization Test (SOT), which allows the Physical Therapist to determine if the client is having difficulty with their Visual, Proprioception, or Vestibular systems.
 - This is done by having eyes open or closed, a fixed floor or moving floor, and a fixed or moving surrounding.
 - Although there is a machine for this, in the following picture, you will not necessarily be put through it exactly the same way.
 - * Without the machine, this can be done with blindfolds, balance pads, and posters.
 - * This also can be done virtually in the comfort of your own home!
- The client will then be treated for the appropriate system by:
 - Looking at moving pinwheels, videos of multicolored spirals, or videos of walking through grocery stores.
 - Sitting on a bouncing ball, walking on a treadmill, or standing on a moving force plate.
 - Head movements and body movements in different directions with eyes fixed on different targets





Lynda video—motion sensitivity

Other treatment options include anti-nausea bands or stickers or medication, however these are only "band aids" for the problem, they will not actually fix the problem.

SUMMARY

As you can see, vestibular issues and dizziness can be quite complex. They require highly skilled evaluation and treatment. Without proper evaluation to determine the cause(s), figuring out the proper treatment approach is nearly impossible. There are years of research and experience which only a true professional is able to guide you through.

Here at BreakThrough, we see many people who have failed to recover through a variety of other methods. We even had someone express complete elimination of symptoms after just a few virtual sessions. When you have a trained professional asking all the right questions, then options for success are available from anywhere. If we were unable to resolve it remotely, we'd be able to refer the person involved to a proper local professional.

DO NOT IGNORE THOSE SYMPTOMS. Contact your PCP, ENT, or PT as soon as possible to get treatment started.

<u>Click here</u> for a brief questionnaire that will help you think through your symptoms a bit and help us better serve you.

<u>Click here</u> for a more comprehensive questionnaire.

In order to get help today, please visit us at **BreakThroughPT.com**. We look forward to helping you, your family, friends and colleagues in the years to come.

Break**Through**

BreakThroughPT.com