

Physio News

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LAKE COMO-ITALY

Get Some Balance

Miami Physiotherapy

One of the most fascinating things about the human species is our ability to stay upright. While most of us take our balance for granted, our bodies are actually hard at work trying keeping a very tall thin object balanced over a very small base of support (That's you!).

In fact, balance is kept by a combination of systems in our body that work together in very close communication. Coordinating everything is our brain, which takes in huge amounts of information and makes decisions, some conscious, some not, about how to keep balanced.

Some of this information comes from our eyes. Our vision helps us make sense of what is around us. Based on what we see, we can decide how we need to react, for example if we need to step up, down or around something. Our vision is very important, but it's not the whole story, after all, just because the lights go off suddenly doesn't mean you're about to fall over.

Also at work is the vestibular system. These are three semicircular canals of the inner ear which are designed to perceive exactly where the head is in relation to gravity. This is actually an amazingly accurate system.

When the vestibular system is not working well, we find it almost impossible to stay upright. Just try to walk straight after spinning around a few times and you'll understand how important the vestibular system is.

Our body also knows how it is positioned without needing to look. This is called proprioception and very important for things such as making sure our feet are properly positioned before putting all our weight on them.

Once all of this information has been put together, our brain sends a message to the muscles of the body telling them when and how much to activate. Our muscles have to be strong enough to support our weight and respond to any force that might make us fall over.

Why is this important? If your balance starts to fail, it can have a devastating impact on vour independence. With so many factors in play, our bodies can compensate for quite a while before you really notice. The good news is that your balance can always be improved! Keeping active is one of the most effective ways to stay balanced and of course your physiotherapist can offer great advice and exercise programs to keep you on your feet.

Work This Out

What is it that you can keep after giving it to someone else?

What gets wet when drying?

The more you take, the more you leave behind. What are they?

Answers next page...



Gravity Defying Feats

Here's an interesting party trick to impress your friends. Take a flat plate and pour a little bit of water over it. Next find a candle to place in the center.

Light the candle and then place a glass upside down over top of the while it is burning. Then watch as the water slowly moves like magic from the plate and up into the cup!

ITB Syndrome

What it is?

The Iliotibial band, or ITB, is a thick fibrous band that passes over the outside of the thigh, from the hip to just below the knee. Iliotibial Band Syndrome refers to a condition with familiar symptoms, typically a sharp, superficial pain that starts gradually on the outer part of the knee. It is sometimes accompanied by swelling and stiffness and becomes worse as the condition progresses. The cause of this pain is generally due to friction that occurs as the lower part of the band rubs over a bony part of the outer knee.

As the most common cause of outer knee pain in runners, ITB syndrome is also known as 'runner's knee', although now is often seen also in cyclists and climbers.

What causes it?

Certain movements raise the stress in this part of the band and increase the chance that it will become irritated. The word to describe this is Biomechanics, which refers to the way our body parts

interact with each other as they move. Biomechanics can be affected by both environmental and non-environmental factors.

Environmental factors include incorrect or worn out running shoes which no longer absorb force well, running on steeped surfaces so that one leg is put under extra stress, incorrect bike dimensions or a training program that is too intense. Interestingly it has been shown that running long distances slowly is worse for this condition than running quickly.

Non-environmental factors on the other hand refer to things that are specific to the patient; these include structural things such as having one leg longer than the other or over pronating ankles which cause one leg to roll inwards while running. It could also be due to tight or weak muscles, particularly around the hip. The gluteal muscles are the most common culprits as they attach directly into the ITB. Recent research has actually shown that having a narrow step width while running can predispose a person to ITB syndrome, which in turn may also be a result of gluteal muscle weakness.

How to treat it?

For ITB syndrome, diagnosis might be easy, but treatment is much more difficult as the causes are different in every case. In the first stage, treatment consists of rest. ice, replacing worn out shoes or changing bike settings. As the problem resolves, a biomechanical analysis can help determine if there a problem with running muscle technique, weakness, tightness or if orthotics might be helpful. Stretching and soft tissue with an appropriate strengthening program can be of great benefit at this combined with a gradual retraining program. For most people, treatment will take around six weeks, however in very severe cases surgery or cortisone injection might be used.

Physiotherapy can help identify which factors are most likely causing symptoms and advise the best course of action. As always, advice is given with the goals of the patient in mind and treats the underlying source of the problem to prevent recurrence



Have you heard of TED?

BLOG OF THE MONTH

CHOCOLATE & ZUCCHINI

This blog has a fantastic collection of unique French recipes which focus on both health and indulgence with a twist!

As a suggestion, why not try...

Buckwheat and gingerbread salad. Find it at...

http://chocolateandzucchini.com/

This month watch.... Amy Cuddy "Your body language shapes who you are"

Can you really fake it until you make it? Amy Cuddy thinks so, and explains how your body language changes not only how others perceive you, but also how you feel about yourself!

http://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_are.html

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Answers: 1. Your Word 2. A towel

3. Footprints