

# NERANG PHYSIOTHERAPY

Physiotherapy for the whole family

Newsletter May 2014

## Night pains

Have you ever suffered pain at night even though you were not moving? Do you find it difficult to get going in the morning, easing as you start to move about? Do you have to get out of bed early in the morning to walk around to try and ease your pain?

All the above and many more symptoms that are not mechanical in origin, i.e. pain with movement, are a result of the body's inability to generate sufficient blood flow rate to maintain good oxygen levels.

This control is the job of a specialised nervous system called the Sympathetic Nervous System, which is situated in the back next to the spine under the rib cage from the level of the shoulders to the waist. It controls all the automatic systems, such as goose bumps, perspiration, hairs standing on end, heart rate and gut function.

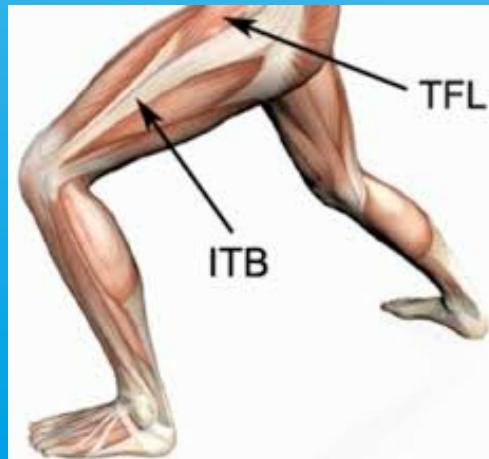
Most importantly it controls the tone of your blood vessels, and thus the rate of blood flow to your body. The better the tone, the faster the blood flow. If this nervous system tires or is injured it may lose control of this blood vessel tone, resulting in slower rates of blood flow.

This is exaggerated at night as the resting blood flow rate, normally slower at night with less activity, slows down below normal levels and thus reduces oxygen and nutrition to the relative body areas which results in pain. This pain is the body's warning sign to say, "please move", as movement will demand more blood, therefore increasing oxygen supply and reducing pain.

So how can this be restored? Nerang Physiotherapy has a technique like no other, simple, safe and highly effective that restores the nervous system and improves blood flow rate. Don't delay, get there now and feel the difference!

Unit 8/5-7 Lavelle Street, Address Line 2, Address Line 3, Nerang

Tel: (07) 5596 4711 | Web: [www.nerangphysio.com](http://www.nerangphysio.com) Email: [nerangphysiotherapy@onthenet.com.au](mailto:nerangphysiotherapy@onthenet.com.au)



## NON-TRAUMATIC MEDIAL KNEE PAIN

Whether you play sport, run or sit behind a desk, you could experience knee pain at some stage of your life. When it happens the common statement is: "I don't remember doing anything to get pain in the knee."

Of all knee pains, the pain on the inside of the knee is most common, but the general common cause of most knee pain is the same, **poor hip muscle function**. It is very seldom knee pain will be the result of the knee only, even arthritis. The knee is mostly the victim of imbalance higher up the mechanical chain.

So how does the knee pain start? In most forms of activity and also when sitting at a desk all day, a higher demand is put on the Sympathetic Nervous System to deliver larger rates of blood flow to the muscles of the legs and back. If this demand exceeds capabilities of the nervous system, the nerve cells become fatigued.

Fatigue of these nerve cells, which control the tone of the blood vessels, results in reduction of the rate of blood flow to the legs. The hip muscles, therefore, receive lower blood flow levels, and this results in weakness of these muscles and tightness of their soft tissue sheaths, thus stiffness and weakness often go hand-in-hand.

Weak hip muscles forces the body to compensate as it requires a stable pelvis from which to function. Hence lower back and thigh muscles are recruited to compensate for the weak hip muscles and this in time will result in tightness and weakness of these muscles as well.

One main link between hip and knee is the ITB (see diag), a thick band of dense connective tissue running down the outside of the thigh. This is attached to the shin bone just below the knee cap, and when tight it will pull the shin bone outwards, resulting in the foot pointing outwards.

This mechanical mal-alignment during walking/running causes the knee to be forced into a knock-knee'd action, stressing the inside of the knee causing pain. It can also cause pain on the outside of the joint as the ITB crosses over the knee, typical in runners known as 'runner's knee'.

So to treat the knee pain it is obvious we have to start up at the hip mechanically and the Sympathetic Nervous System functionally. Only at Nerang Physiotherapy will you get this complete bio-functional analysis of the condition and treatment of the true causes of the weakness, stiffness and pain.

Nerang Physiotherapy offers a complete and accurate assessment of your knee starting from the hip, the true cause.

## EXERCISE OF THE MONTH:

### CAT VOMIT



The next instalment for abdominals is the Cat Vomit. Now if you are laughing your head off, you will be working the muscle this exercise is aimed at, i.e. transverse abdominis. This is the 'girdle' that holds the stomach in.

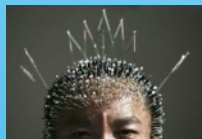
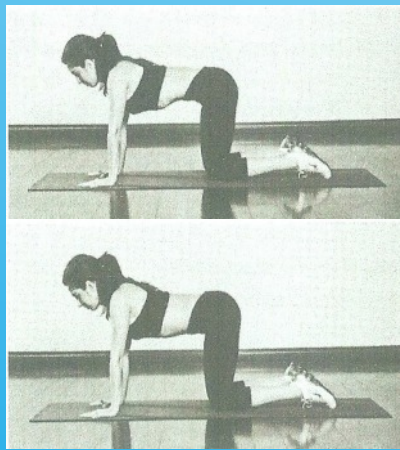
Unfortunately laughing repeatedly in the gym will get you a straight-jacket, so here is the alternative:

1. Get on all fours and look straight down to the ground. Don't arch your back or neck.
2. Exhale forcefully through the mouth till all the air is expelled. Your abs should be contracted well due to this. This will contract the transverse abdominis, and you will use gravity to provide resistance.
3. Hold your breath and pull your belly button upward toward your spine as hard as you can and hold it there for a target of 8 to 12 seconds.
4. Inhale fully through the nose after the hold.
5. Take one breath cycle of rest (exhale slowly out the mouth, inhale slowly through the nose), then repeat the above for a total of 10 repetitions.

There you have it, heave, groan and be merry.

Please note, this exercise and the Myotatic crunch only need to be done twice a week for results. A common mistake is to do exercises like this every day, which could lead to overuse and dysfunction. So go for it, vomit like a cat and get your tummy flat.

## Have a laugh



## What is Acupuncture?

For over 3000 years, the concept of Acupuncture has been helping people with all forms of pain, dysfunction and disease.

In fact it has been postulated the concept could go back as far as the caveman, as small sharp stone artefacts have been found in caves with blood on the tips. This would correlate with the 'scarification techniques still used in Africa to this day, where fine cuts are made in the painful area with a razor blade and bled.

It has been found that these scarification marks correlate to many Acupuncture points.

In traditional speak, Acupuncture works by releasing energy flow (Chi) in the body that has become 'stagnated', thus allowing the body to repair itself.

In laymen's terms, Acupuncture needles cause micro-trauma, little injuries that the body is asked to heal, and this healing process involves the entire system, thus pain and dysfunction can be treated.

Used in conjunction with other techniques, especially soft tissue release techniques, stretch and gentle massage, Acupuncture can be very effective in treating muscle, soft tissue and joint pain, as well as chronic pain and sports injuries.

In most situations it is virtually painless when done correctly but the effects can be amazing. In the end, what Acupuncture does is stimulate the body to heal itself. It kick-starts physiological changes in the body (just like any traumatic injury would), such as better blood flow, pain-relief and anti-inflammatory effects.

Acupuncture is a scientifically proven way to treat pain, dysfunction and injury, so don't be shy, give it a go, you will be glad you did.

## BRAIN TEASERS OF THE MONTH

1. There was a green house. Inside the green house there was a white house. Inside the white house there was a red house. Inside the red house there were lots of babies. What is it?
2. A man is pushing his car along the road when he comes to a hotel. He shouts, "I'm bankrupt!" Why?
3. A ladder hangs over the side of a ship anchored in a port. The bottom rung touches the water. The distance between rungs is 20 cm and the length of the ladder is 180 cm. The tide is rising at the rate of 15 cm each hour. When will the water reach the seventh rung from the top?
4. Two girls were born to the same mother, on the same day, at the same time, in the same month and year and yet they're not twins. How can this be?

### Did you know:

A man has to walk the equivalent of 138 hours continuously to lose 1kg of fat, for a woman it is 242 hours! So if you think your half hour jog is going to do you any good, think again. Endurance is the key.

In the first 20 minutes of exercise the body uses other sources of energy such as fatty acids in the blood and ATP (adenosine triphosphate). After 25 minutes most energy comes from glycogen and reserve fats, and then after 40 minutes fats are the main source of energy.

To get best results you would have to engage in endurance sports such as swimming, cycling or jogging which should last at least 40 minutes.

And don't make the mistake of thinking that belly fat is burned when you do sit-ups or under-arm fat is burned doing push-ups, the fat could come from the most available source anywhere in the body.

### Tip of the month:

It has been shown that it takes the body about 48 hours to fully recover from an exercise session (including the immune system) and the physiological benefits from exercise take place in the few days AFTER exercise. So to benefit better from exercise and prevent over-training and injury, it is recommended you **exercise no more than 3 times per week** with the magic time being 48 hours between sessions. It does not matter what part of the body you exercise, the whole body is affected and requires recovery. "You don't get fit through exercising, you get fit through RECOVERING from exercise", Professor of Sports Science, Loughborough University, UK

Answers: 1. A watermelon 2. He was playing Monopoly. 3. If the tide is raising water, then it is raising the ship on water, too. So water will reach still the first rung. 4. The two babies are two of a set of triplets.

Like us on Facebook