

March, 2014

www.rsi.org.au

# IN HAND



The Newsletter of the RSI and Overuse Injury Association of the ACT  
Supported by ACT Health and the Southern Cross Club

Autumn 2014

## News & Events

### Free Assisted Tour: Gold and the Incas

When: 3.00pm, April 3

Where: National Gallery of Australia

Please RSVP to us via phone or email

### Emmett Therapy: A New Treatment for Pain

A talk and demonstration.

Speaker: Andrew Earl, Emmett Therapist

When: 12:30pm, April 10

Where: Room 9, Griffin Centre

Cost: Free, all welcome. Tea and coffee available, feel free to bring your lunch!

#### Helping people with RSI:

- Telephone information service
- Referrals
- Guest speakers
- Events and social gatherings
- Treatment options
- Ergonomic devices
- Voice-operated computing
- Workers' compensation
- Tips and tools for daily life



Intuous Tablet Review page 12

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## EMMETT THERAPY: A NEW TREATMENT FOR PAIN

The Emmett Technique is a special form of body therapy that involves light finger pressure at specific points. It can be used on its own or in addition to other forms of muscle-release and musculoskeletal therapies (such as massage, chiropractic, physiotherapy, occupational therapy and others).

Developed by Bowen therapist Ross Emmett in Queensland, the therapy is performed in stages. Practitioners say that it enables gentle releases for common problems including neck, shoulder and back pain.

We'll be hosting a **free talk and demonstration** by Andrew Earl, a Canberra practitioner of Emmett therapy, to be held in **Room 9 of the Griffin Centre** on **April 10**. Bring your lunch! Coffee and tea will be provided.

## LETTERS TO THE EDITOR

*"My doctor says I have cervicobrachial neurological syndrome (CBNS), but I can't find any information about it. Could I have RSI?"*

There seem to be a million names for RSI! Cervicobrachial neurological syndrome is one of the newer ones, as is cervicobrachialgia.

RSI – for repetitive strain injury – was used to describe the epidemic that occurred in Australia in the 1980s. It is still used for the condition in the UK and parts of Europe. Australia decided to go with "occupational overuse syndrome" in the late 1990s and New Zealand went along with us.

In the Netherlands, they've decided to use "complaints of the arms, neck and shoulders" (CANS) and in the US they call it "cumulative trauma disorder", a term that includes back problems.

Before the 1980s, RSI was called "tendinitis" or "tenosynovitis". Both of these imply that the problem is mainly inflammatory, a view that is now contested. But people are still being diagnosed with these conditions. In sports medicine, "tendinosis" or "tendinopathy" are used instead, implying that the condition is degenerative. The umbrella term in sports injuries is "overuse injury".

All of these different terms create problems for doctors, medical researchers, patients and support groups like us. How do patients find the right help and what do support organisations like us call ourselves? It's a hard call!

### FREE! HIPPYCHICK HIPSEAT

This is a baby seat that straps around the waist to reduce arm, neck and shoulder strain. We've got one in the office to give away.

For more information call us on (02) 6262 5011 or email us at [admin@rsi.org.au](mailto:admin@rsi.org.au)



# BITS & PIECES

## NEW NZ PAIN FOUNDATION



The NZ Pain Foundation is a new initiative that will fund research into self-treatments for people with lower back pain, neck pain, migraine, depression and obesity.

The foundation, established by Wellington musculoskeletal and pain specialist Dr Giresh Kanji (above), will focus on simple treatments that are easy to use.

In his PhD research, Dr Kanji found that heat treatment through regular use of a sauna was as effective as mainstream medication for people with chronic tension-type headache.

"I started working full time in pain medicine over ten years ago and recall going to work with a feeling of dread. What was I going to do to help these patients? Prescribe medicine that never seemed to cure the suffering and often caused side effects?" said Dr Kanji. "I was no longer happy prescribing medications without trying to understand the cause of people's pain."

The initial research will be undertaken by six masters students supervised by Dr Kanji and Massey University Associate Professor Rachel Page.

Dr Kanji hopes support for the NZ Pain Foundation will enable it to build on his initial work by providing further insights into pain and researching a wide range of self-treatments for common pain conditions.

Pain Australia, Issue 32, November 2013

## MUSIC TO MANAGE PAIN

A research group at the University of Malaga, with the cooperation of the American Chronic Pain Association (ACPA), has designed a music therapy app to help in the self-management of chronic pain.

Researchers are inviting chronic pain patients to download the free eMTCP app and provide feedback to help better understand the usefulness of the tool.

The music has been designed by music psychologists to affect pain perception by drawing the mind away from the pain and helping people relax and fall asleep.

It can be used anywhere there is an Internet connection and can be useful for people who have problems falling asleep.

To learn more about the app you can visit:

<http://theacpa.org/music-therapy-app>



Pain Australia, Issue 32, November 2013

## MEDICINE WISE PHARMACIST ONLINE

NPS Medicine Wise have introduced a Facebook chat hour with their pharmacist to answer any questions you have about medicines. Chats will be held on Thursdays from 3-4 pm. For more information, check out the link on our Facebook page.

[www.facebook.com/RSIACT](http://www.facebook.com/RSIACT)

# RESEARCH IN BRIEF

## VERTICAL MICE VS STANDARD MICE



This study measured a range of variables to compare vertical mice with standard mice. These included muscle activation, forearm movement, performance and satisfaction in the sixteen participants. Researchers concluded that those using the vertical mice experienced less wrist movement and lowered muscle activity – both of which are pluses. The only minus for the vertical mouse users was that it took some time to become used to the feel of the new mouse.

Source: Quemelo, P., and Vieira, E. (2013). Biomechanics and performance when using a standard and a vertical computer mouse. *Journal of Ergonomics*, 56, 1336-1344.

## TABLETS, A PAIN IN THE WRISTS

Fifteen adult tablet users were monitored to assess the effect on the wrists of using a touch screen tablet. Multiple methods of holding the tablet were tested, including placing the tablet on the lap, holding it in either hand, or with both hands. The results indicate that tablet users are exposed to high levels of unnatural positioning of the wrists which, the researchers warn, could lead to development of musculoskeletal disorders. The participants' dominant hand experienced the most strain, especially during typing and placing the tablet on the lap. The researchers concluded that, to avoid muscle strain, cases or stands designed to alter the tilt of the screen should be used to prevent users doing this with their hands.

Source: Young, J., Trudeau, M., Odell, D., Marinelli, K., Dennerlein, J. (2013). Wrist and shoulder posture and muscle activity during touch screen tablet use: Effects of usage configuration, tablet type, and interactive hand. *Journal of Prevention, Assessment and Rehabilitation*, 45, 59-71

## SURGERY AND CARPAL TUNNEL SYNDROME

Does carpal tunnel surgery help in the long term? A study conducted in 2011 by the Curtis National Hand Centre, United States compared patients who cancelled surgery with those who didn't, six years after surgery. Although both groups experienced improvement, surgery had significantly better outcomes. Patients who had had surgery had fewer symptoms, but improvement in actual function was not so different between the two groups. On average, surgical patients reported that they began to feel better around six months after surgery.

Source: Pensy, R., Burke, F., Bradley, M., Dubin, N., Wilgis, E. (2011). A 6-year outcome of patients who cancelled carpal tunnel surgery. *Journal of Hand Surgery European Volume*, 36, 642-647.

## SOCIO-ECONOMIC DEPRIVATION AND CARPAL TUNNEL SYNDROME

The lower your socio-economic status, the more likely you are to have carpal tunnel syndrome. That's the conclusion of a recent 6-year study of 1,564 patients, which also found that both arms are more likely to be affected in these patients. They are also more likely to have a higher level of disability than those with a higher socio-economic status. Workers with high levels of occupational vibration had the worst cases of carpal tunnel syndrome.

Source: Jenkins, P., Watts, A., Duckworth, A., McEachan, J. (2012). Socioeconomic deprivation and the epidemiology of carpal tunnel syndrome. *Journal of Hand Surgery European Volume*, 3, 123-129.

# A MEMBER'S JOURNEY WITH RSI

I was 26 and had been enjoying my career in a small business for the past five years when I had a sudden increase in my typing workload over a couple of months. Shortly afterwards, I suddenly developed sharp pain in my wrists, and my hands and forearms became very swollen. I sought treatment from a physiotherapist and myotherapist immediately and after about two months of ultrasound treatment and dry needling, as well as anti inflammatory medication, the swelling finally settled.

The pain, however, persisted and expanded to my forearms, upper arms, shoulders and upper trapezius. I had six weeks off work and continued treatments, before returning to work on modified duties. I started out with five minutes per day of typing, and gradually increased to 20 minutes per day of typing.

I initially resisted making a Workcover claim as I had hoped that with treatment the condition would resolve quickly. I was also very worried about the stigma that still surrounds Workcover and didn't want anyone to think less of me. Over time, though, the treatments began to add up and we couldn't afford to keep paying for them on our own. About three months after the symptoms set in, I reluctantly spoke to my employer about making a Workcover claim. They seemed fine with it and everything went through smoothly. They accepted liability for the condition and were very supportive.

Unfortunately that didn't last very long, and once the claim was accepted, they stopped paying my wages. They advised me that as the claim had been accepted, Workcover would take over paying my wages, and Workcover advised me that my employer would need to continue paying my wages and be

reimbursed by Workcover. The arguments went on for six months, with the insurer ignoring me when I advised them that my employer was refusing to pay, and my employer ignoring my pleas for them to pay me. At the time, I was working just five hours a day.

We racked up debt on our credit card paying for weekly physiotherapy and myotherapy treatments for six months without my income, and at that point I had exhausted myself trying to deal with the situation without losing my temper. I made an official complaint to Worksafe about my employer for refusing to pay me and my insurer for refusing to deal with it. I also made a complaint to the Fair Work Ombudsman. Within days both agencies had advised my employer of the complaint and threatened them with large fines if they did not pay me the past six months worth of wages plus interest. This was the point at which I finally started to receive weekly payments directly from the insurer as the employer could not be trusted to follow through with their responsibilities.

I continued with treatments while I worked part-time on modified duties, and tried Feldenkrais along with the physiotherapy and myotherapy. I did the Feldenkrais for six months before stopping as I felt I wasn't making any progress and it wasn't for me.



There were many sets of stretches and exercises from the doctors that I had to do several times a day at home and at work. I disliked doing them at work as my employer would often walk past and make jokes about how silly I looked doing particular arm stretches. I kept up a happy face at work and didn't discuss my health or Workcover issues with any of my co-workers as I was afraid of them thinking less of me being on Workcover, or taking my employer's side. Eventually they did find out and, thankfully, were very kind about it. They were also quite appalled at how our employer had treated me.

After stopping the Feldenkrais, my musculoskeletal specialist suggested some trigger point injections into my upper trapezius. These were rather painful; it involved injecting the needle into a tender spot, then wriggling the needle around until it hit the trigger point. Then the trigger point was injected with a local anaesthetic. I found this gave me some pain relief in the upper trapezius but unfortunately didn't make any difference to my wrists or arms.

Twelve months after I developed OOS my employer made me redundant as there was no work available without a large amount of typing involved, and I was only able to do one hour per day of typing by that stage.

I continued with the physiotherapy, myotherapy and home exercises, as well as things I could do to self-manage pain at home, such as ice when swelling cropped up intermittently, heat packs and hot Epsom salts baths for the pain, as well as using a TENS machine. I was able to purchase a TENS machine through my private health insurance with no out-of-pocket costs. I was also given a "spiky ball" by my myotherapist, which is excellent for self massage, as with RSI and OOS you can't use one injured hand to

massage your other injured hand! I also got approval from Workcover to do a three-month gym program where I used the treadmill and exercise bikes. I felt a little better when I was more active, but couldn't afford the gym fees after the three-month program finished. Now I ride my bike regularly and find it eases some of my pain. I had to get a bike that has an upright seating position so there is no strain on my wrists.

After my redundancy I spent three or four months researching options for a change of career, as my doctors had advised that any work in the field I was in before was out of the question now I had OOS. I had always liked the idea of working in health and helping people, and kept this in mind when looking at possibilities. I worked with my occupational therapist, myotherapist, musculoskeletal specialist and GP to think of retraining options, and after a few false starts we found that I could retrain in Allied Health Assistance. My doctors and I all submitted reasons why I should be permitted to retrain in this area, and eventually it was approved. I found a part-time course that allowed me to spread the study over the week so I wasn't overdoing it, and there was no typing involved in the course. I really enjoyed retraining and my placement and successfully gained a new qualification.

I have applied for a number of jobs since qualifying, with the assistance of a rehabilitation consultant. Unfortunately their policy was to make the prospective employer aware of the injury and Workcover claim at the application stage, and I believe that contributed to my resume being dropped to the bottom of the pile and not progressing to interview stage. That Workcover stigma is still difficult to get past with a lot of employers. I experimented with one and didn't mention it in my application. I got called in for an interview and advised them of it during the interview

but wasn't successful. At this stage I am trying to gain recent experience in health through volunteering, in the hopes that it may lead to employment in the future.

I still have difficulties every day with housework and daily activities. I often get a flare-up in pain from silly little things such as giving my cats a pat or picking them up, but I have improved a lot in the past three years. In the beginning I had to rely on my husband to do most things for me. Opening doors, jars and bottles, cooking, picking things up and carrying things for me, buttoning up my clothes and zippers, and all of the housework was left to him. He has been an enormous support with daily tasks as well as emotionally and I don't know how I would have got through without his help. Now I can wash the dishes and clean the kitchen and bathroom, and with the assistance of many new kitchen gadgets I can cook and bake most things I used to. I still need help with some tasks and there are a few things that I can't do at all like mopping the floors and filling the car with petrol. Thankfully my husband is very understanding and helps with those things when I need him to, but recognises that I need to regain as much independence as possible so doesn't try to do "everything" for me.

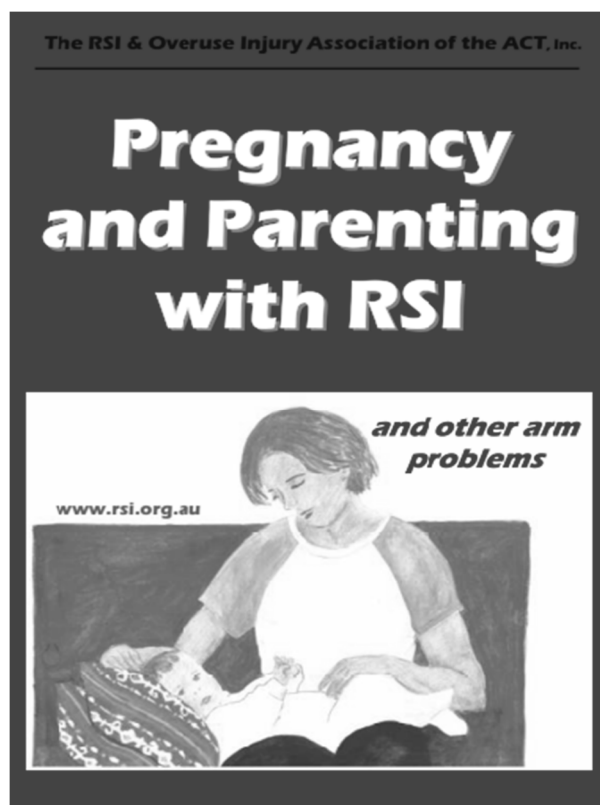
I am finding so much helpful information and support from the RSI and Overuse Injury Association since I have joined, in particular the 'Pregnancy and Parenting with RSI Handbook' has given us really helpful tips and more importantly, has given us hope that we will manage with children one day in the future despite the RSI.

### **NOW AVAILABLE ON KINDLE**

Our book RSI: A Self Help Guide is now available to purchase through Amazon Kindle for \$4.95.



RSI: A SELF-HELP GUIDE



*"...I am finding so much helpful information and support from the RSI and Overuse Injury Association since I have joined, in particular the 'Pregnancy and Parenting with RSI Handbook' has given us really helpful tips and more importantly, has given us hope that we will manage with children one day in the future despite the RSI..."*

# SEARCHING FOR THE CAUSE OF RSI— CAN RSI BE MEASURED?

Are you fed up with people saying that “it’s all in your head”? I am! You can now give them some actual counterevidence, backed by research from Jaap Brunnekreef. In his PhD dissertation, he shows that there is actual scientific proof of a physical difference between people with RSI and people without RSI. Brunnekreef’s research offers a deeper insight into the possible causes of RSI.

So what differences are there exactly between people with and without RSI? Jaap Brunnekreef has undertaken research to establish what mechanism causes RSI. Previous research already showed that RSI influences blood flow in the arms, so that is where Brunnekreef started his research.

He concludes that RSI patients, after completing sets of squeezing exercises, have a lower blood flow to, and oxygen uptake in, the muscles in the affected arm. Figure 1 shows the set-up of this experiment. Healthy people show a definite correlation between oxygen uptake and the intensity of the exercise: the higher the lifting load, the higher the oxygen uptake. This is different for people suffering from RSI – the oxygen uptake does not increase as more effort is needed to move the load. Even RSI patients that suffer from RSI in just one arm showed a similar effect in the ‘healthy’ arm.



Figure 1

Brunnekreef then investigated the role of muscle fibres, as these are crucial for the blood flow to the muscles. Muscle fibres are divided into two categories: type 1 and type 2.

Type 1 are called "slow twitch" muscle fibres and they are red in colour and can transport a lot of oxygen. Type 2 are called "fast twitch" fibres; they are white in colour and do not transport much oxygen.

Brunnekreef’s test results show that RSI patients are likely to have **more type 2 muscle fibres**, even in the non-affected arm.

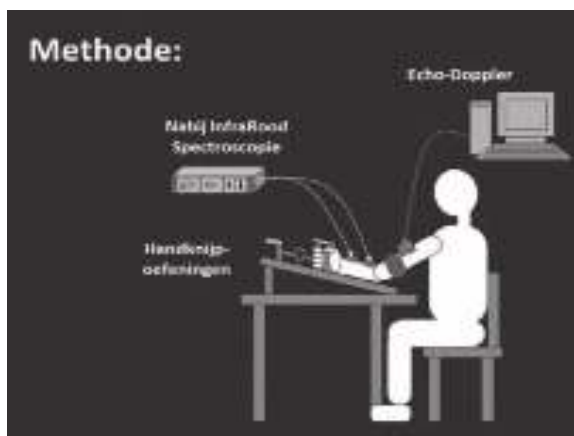


Figure 2

The last step in Brunnekreef’s research looked at the blood vessels. The inside of the blood vessels is covered in endothelium and this plays an important role in regulating the blood flow. For RSI patients having trouble with blood circulation to the muscles, this would therefore mean that the cause could be a problem with the endothelium.

Brunnekreef measured the diameter of an artery and the speed of the blood flow through it for both patients with and without RSI while doing squeezing exercises (figure 2 and figure 3). He was able to show clear differences between



patients with and without RSI relating to blood flow and the state of the endothelium. Patients with RSI had less blood circulating to the arm and the blood vessels expanded less.

## WHAT DO THESE DIFFERENCES REALLY MEAN?

Brunnekreef has found many demonstrable differences between RSI-patients and patients without RSI, including a difference in blood flow and circulation, oxygen uptake and saturation, muscle fibre and the quality of blood vessels. These differences are also visible in the non-affected arm. This is a new finding.



*Figure 3*

This also suggests that RSI might not just be a local disturbance or imbalance in a particular body part, but that it could possibly have a more systemic influence on other parts of the body as well. This then means that therapists treating RSI patients should not just concentrate on the area of the body where the pain is most acute, but on the whole body. Remedial therapy is one of the only therapies proven to be effective when treating RSI. Exercise and resistance training can also locally and more broadly have a positive effect on the body.

The fact that RSI also has a demonstrable effect on the other, originally non-affected arm, shows that there is a risk that RSI can spread to other body parts. For RSI patients this is not an unknown phenomenon, but it has never been scientifically investigated. Brunnekreef found that patients where the RSI had spread to the other side of the body had been suffering from RSI for a longer period of time, generally speaking.

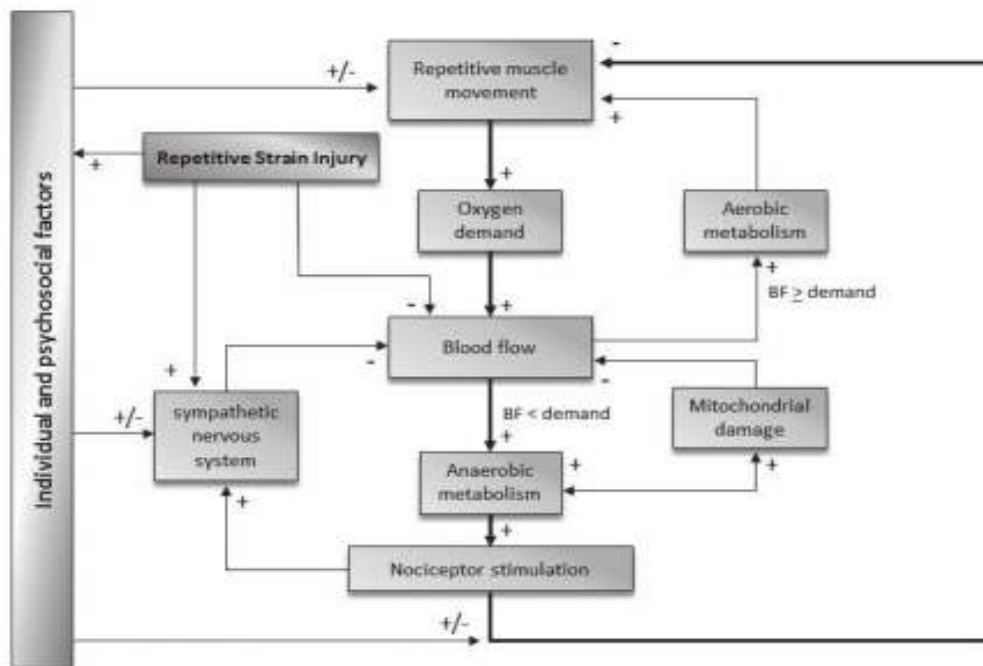
A lower oxygen uptake in the muscles means that the body's metabolism has less oxygen to function with. A consequence of this is that lactic acid is produced much faster than normal when putting strain on the muscles, and so muscles will get tired faster. Getting tired fast during repetitive movements is one of the most important and most visible characteristics of RSI-symptoms and the mechanism Brunnekreef describes offers an explanation for this.

An important question to ask is: are these differences a consequence or rather a cause of RSI? Brunnekreef's research was not longitudinal (following patients over a period of time), and so the question for now remains unanswered. It could however be assumed that, if these differences are a consequence of RSI, the difference in, for example, oxygen uptake, would be larger depending on the length of time a patient has suffered from RSI, or depending on the intensity of the pain caused by RSI. Brunnekreef's research results then suggest that the measured differences could be a cause rather than a consequence.

## HOW IS RSI CAUSED ACCORDING TO THIS NEW RESEARCH?

Brunnekreef has taken all the results of his research and proposes a new model for explaining the cause of RSI (*figure 3*). In this model, repetitive movement causes a higher demand for oxygen, and oxygen

uptake and saturation. In normal situations, oxygen plays an important role in converting glucose into energy. This happens predominantly via type 1 muscle fibres, the 'slow' type of fibres.



When there is insufficient oxygen (anaerobic), lactic acid is also produced when glucose is made into energy and this stimulates the tips of the nerve cells (nociceptors). This stimulus is what non-scientists call pain. Pain often leads to a change in behaviour and a decrease in the movement that causes the pain. This is a normal process for healthy people.

When looking at RSI patients, a number of things have a negative influence on this normal process. Lower blood flow during exercise, limited oxygen uptake and decreased endothelium function means that the necessary higher oxygen uptake and saturation does not eventuate, or only to a lesser extent.

The body switches faster to an anaerobic state and produces lactic acid, causing pain much faster. In addition, pain and psychosocial factors like stress lead to increased activity in the sympathetic nervous system, which also slows down blood flow and circulation.

Another factor in the proposed model is tissue damage, or mitochondrial damage. Previous research has shown that ongoing strain can lead to damage of the mitochondria, the power plants of the muscle cells. This damage causes the body to switch to an anaerobic state that leads to the production of lactic acid, followed by pain. Pain is a powerful stressor and causes an increase in stress hormones. These stress hormones in turn influence the sympathetic nerve system, this leads to lower oxygen saturation, and the vicious circle starts.

## CONCLUSION AND DISCUSSION

Jaap Brunnekeer's research is a solid investigation into a mechanism that possibly causes RSI. There is a clear and demonstrable correlation for RSI patients between blood flow, oxygen uptake and saturation, type of muscle

fibre, and quality of blood vessels. The research shows measurable differences for patients with and without RSI. The findings of this research, combined with previous research outcomes, suggest an improved model for the cause of RSI and what processes play a part in it.

The findings of this research are not just of theoretical importance; there are also a number of practical consequences. One important finding is that practitioners have to keep the whole body in mind when treating RSI, not just the exact spots where patients feel the pain. Remedial therapy as well as exercise is an important part of a treatment. Attention also needs to be paid to psychosocial factors, like stress and work pressure, that have a negative impact on the RSI mechanism through the nervous system.

Text: Sandra Oudshoff

Source: Brunnekeerf, Jaap J.J. (2012). *Repetitive strain injury: a novel focus on an ancient problem*. PhD thesis, Radboud University Nijmegen, ISBN: 978-90-9026887-3.

*Our thanks to Ellen Poels for translating this article from the Dutch RSI Association newsletter, het Handvat.*

## WHO IS JAAP BRUNNEKREEF?

Jaap Jan Jakob Brunnekeerf graduated as a physiotherapist and movement scientist. Since 2006 he has been a lecturer in Physiotherapy at the Higher Education Institute of Arnhem and Nijmegen. From 2002 to 2007 he worked as a physiotherapist at the Radboud Hospital in Nijmegen. He has published a number of scientific papers. In September 2012 he was promoted at the Radboud Hospital after completing his PhD research: "*Repetitive strain injury: a novel focus on an ancient problem*."

Dr Jaap Brunnekeerf contributes to improving the physiotherapeutic treatment of patients suffering from RSI. He is also a liaison person between the Labor and Health Network and the education sector.

## ACCUPUNCTURE, CHINESE HERBS & MASSAGE

We specialise in the treatment of:

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- Shoulder pain
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- Depression & anxiety
- Chronic pain



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# TIPS & TOOLS

## INTUOUS CREATIVE PEN AND TOUCH TABLET

The Intuous Creative Pen & Touch Tablet is a device that connects to your computer via a USB cable. It's designed to assist with drawing pictures, creating artwork and editing photos, as well as converting handwriting to text and replacing the mouse.



To get the program up and running on your computer, you simply plug in the USB cable, connect to the internet and follow the prompts. Installation took less than 10 minutes, but learning to use it took a whole lot longer!

Once installed, the cursor will move when you hover the tip of the pen over the tablet surface. To click, you simply tap the surface of the tablet once (twice for double clicking). I found the movement of the cursor difficult to

adjust to, as my hand rested on the tablet surface (as if I were writing on paper) and the cursor became confused. I found it easier to use my fingers to move and click, similar to using touch screen devices.

Another user points out the difficulty of trying to use the pen with your non-preferred hand, "it's a bit like trying to write left-handed when you are right-handed. However, I find I can do the finger touch with my non-dominant hand. It might not be suitable for those who need to use it as a mouse replacement for their non-dominant hand (at least for pen input)."

I mainly used the pen to handwrite sentences in a pop-up window; these are then converted to text. It can take some time for the program to adjust to your handwriting, but correcting mistakes is as simple as touching the error with the soft end of the pen (like the eraser on the end of a pencil). When you are happy with your text you can insert it into any document by clicking the insert button. The top of the tablet is also home to four 'express keys' (Shift, Control, Alt, Windows Key), again minimizing the need for a keyboard. Overall, I found that a combination of hand, pen work and patience made the device easier to use and much less strenuous than typing.

The tablet and pen retail for \$139 and can be purchased at Viva Voce (<http://www.vivavocesrs.com/wacom-tablets---general.html>). For an additional cost of \$31, a wireless kit can be purchased which means less worrying about tangled and messy cords!

*Thanks so much to Sue Woodward of Viva Voce for donating this device to the Association. Sue has kindly offered a 5% discount for RSI Association members. For more details about this discount and to buy the tablet, email Sue at [info.vivavoce@fastmail.com.au](mailto:info.vivavoce@fastmail.com.au).*

Olivia Duczek

# AGING AND OVERUSE INJURIES

A whopping 29% of all workplace injuries and illnesses in the US requiring time away from work in 2010 were caused by upper extremity work-related musculoskeletal disorders, or in Australian terms, occupational overuse syndrome. Because a number of studies show that older workers appear to be at greater risk of these disorders than younger workers, the US Health and Safety Executive Laboratory has called for more work on the contribution of ageing to this injury.

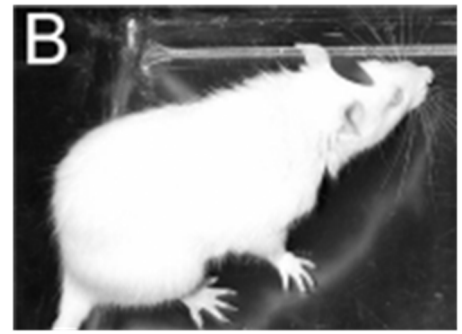
To find out more about ageing and overuse injuries, researchers trained young and older rats to carry out a repetitive low force handle-pulling task. They did this for two hours, three days a week for up to 12 weeks.

Young and elderly rats responded quite differently to this task. While young rats performed better as time went on, aged rats failed to improve.

The young rats experienced a transient decrease in forelimb agility, but the aged rats lost agility permanently.

Moreover, pro-inflammatory cytokines (markers of inflammation) increased markedly in the older rats compared to the younger ones, showing higher levels of inflammation. There were also other signs of increased tissue damage in the older rats.

Research into ageing and overuse injuries is highly relevant to Australia today. Both the Labor and the Liberal parties advocate increasing the retirement age. This means that more people will be doing work that involves repetitive tasks as they move into old age, increasing their chances of incurring a life-changing injury. More RSIs in old age could make a happy and productive retirement nothing more than a lost dream.



*Here's a rat with a sticker on its forehead! To test forelimb agility, the rats had a sticker placed on their forehead and their ability to remove it was measured.*

## OUR NEW FACEBOOK PAGE

We invite you to have a look at our new Facebook page. You'll find lots of news about upcoming events as well as discussions on:

- Keyboard reviews and shortcuts
- Split keyboards
- Robot sweepers — do they work?
- The right pillow for RSI
- Links to useful YouTube stretch videos
- Safer computer use for children
- Research studies on depression and anxiety



[www.facebook.com/RSIACT](http://www.facebook.com/RSIACT)

**There's still time to enter our Facebook Competition!**

You could win a **FREE** 12 month email subscription.

Check our Facebook page for more information.

# KEEP COOKING: EASY RECIPES

## WELSH FRUIT BREAD

This delicious Welsh fruit bread will last for a couple of weeks in a tin and is lovely sliced and buttered. To make it easy to remove the cake from the tin, use silicon bakeware. This cake freezes well.

300g mixed dried fruit (sultanas, raisins, currants, glace ginger, cherries – whatever combination you like)

½ cup of sugar

300ml of strong, hot tea (Chai, Earl Grey – whatever's your favourite)

300g self-raising flour

2 tbsp marmalade

2 tsp mixed spice

1 egg, beaten\*

honey, to glaze

- Mixed the dried fruit and sugar, pour over the hot tea and stand until the fruit is swollen. Do it overnight if you can, or warm the mix in a pot to help speed things up. There should still be some liquid when you go to make the bread.
- Grease a 2 litre loaf tin. Preheat the oven to 170°C.
- Put the fruit in a big bowl, stir in the flour, marmalade, mixed spice, and then the egg. (This could all be done in the mixer).
- Tip the mixture into the greased loaf tin and bake for 60-75 minutes or until a skewer comes out clean.
- Brush the top of the cake with honey just after you remove it from the oven.
- Let the cake cool in the tin for five minutes before removing it from the tin to cool further.

\*If you have trouble beating an egg, you might find a push-down whisk handy, like the 'Miracle Whisk' from [themiraclewhisk.com](http://themiraclewhisk.com).

## CHRONIC CONDITIONS ALLIANCE SEMINAR SERIES EVENTS

*All talks are held at SHOUT, Collett Place, Pearce (Opposite Pearce Shops) at 7pm  
(unless otherwise stated).*

- **SLEEP BETTER, FEEL BETTER**

17 April, Guest speaker Dr Victoria Carr from Psychsessions

- **DISABILITY SUPPORT PENSION AND CARER PAYMENT—WHAT YOU NEED TO KNOW**

15 May, Guest speaker Karl Jordt from Centrelink

- **MINDFULNESS TO REDUCE STRESS**

19 June, Guest speaker Sue Hays from Simply Mindful—Canberra Mindfulness Centre

## Information Sheets Available:

Hydrotherapy  
Swimming for RSI  
Injections for RSI  
Medical & Medico-legal appointments  
Assistance through Medicare  
Member's story: Invalidity Retirement  
Managing your Finances with RSI  
Review: Clickless software & Short-Keys  
You don't have to live with depression  
  
How to sit at your computer  
Massage - why and how it helps with RSI  
Member's story - Studying with RSI  
Managing stress in your life  
Neck pain: prevalence, causes, treatment  
A new approach to pain  
Treatments for Carpal Tunnel Syndrome  
How to win and keep a Comcare claim  
Choosing a keyboard

## Tips & Tools Sheets Available:

Holidaying	In the kitchen
Cycling	Getting on top of your emails
Sewing	Gadgets to help with medicines
Driving	Emails using MS Outlook
In the Garden	Book Holders
In the Laundry	
Writing	
Handles	

*To order an electronic copy of any of the above info sheets, please email us at [admin@rsi.org.au](mailto:admin@rsi.org.au)*

## Booklets Available:

**The RSI Association Self-Help Guide** **\$20**  
Really useful and practical information on treatments, medico-legal matters, maintaining emotional health and managing at home and at work.

**Moving on with RSI** **\$10**  
Stories of people who have learnt to live with serious RSI, with many ideas on how to survive emotionally and successfully manage the condition.

**Pregnancy & Parenting with RSI** **\$10**  
Information designed to help parents with an overuse injury to manage the specific challenges they face.

**Booklets can be purchased online ([www.rsi.org.au](http://www.rsi.org.au)), requested by email, or ordered by mail using the form below.**

## Renewal for Membership & Order Form

*Please make cheques or money orders payable to the RSI and Overuse Injury Association of the ACT, Inc.*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

*I would like to receive my newsletter by email:* ☐

### I enclose:

Annual Membership:	Cost:	
Low Income	\$10	<input type="checkbox"/>
Standard Income	\$20	<input type="checkbox"/>
2 Year Offer	\$30	<input type="checkbox"/>
Organisation*	\$60	<input type="checkbox"/>

Booklets Available:	Cost:	
Self-Help Guide	\$20	<input type="checkbox"/>
Moving on with RSI	\$10	<input type="checkbox"/>
Pregnancy & Parenting	\$10	<input type="checkbox"/>

Donation (tax-deductible): \$ \_\_\_\_\_

**Total:** \$ \_\_\_\_\_

*Save with our two year  
membership for just \$30.00*

# COMING SOON

MEDICARE SAFETY NET — HOW IT WORKS

FIVE THERAPIES TO THINK TWICE ABOUT!

OVER-COMMITMENT AND RSI

HEAT FOR PAIN RELIEF



*Preventing overuse injury, reducing its impact*

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Room 2.08, Griffin Centre  
20 Genge Street  
Canberra City  
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## Contact Us

Give us a call for more information about our services or drop in to our office during our opening hours.

Opening Hours: Mondays and Thursdays,  
10am to 2pm

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of the ACT, Inc.**

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