

1st December
2005



Help St Physiotherapy Summer Newsletter

INDEX

- **Clinic Update** 1
- **Physiotherapy**
Swimming mechanics
and prevention of
common injuries 2
- **Massage**
Benefits of massage pre
and post surgery 3
- **Continuing Education
Update**
Effects of long term
dietary weight loss &
exercise in people with
knee osteoarthritis 4
- **Business partners** 5-6
 - Bone & Joint Clinic
 - Voodoo Espresso
 - Healthy Business
 - Fernwood Fitness
 - Sit back & relax
 - Rebel Sport
 - Living Well
 - Chatswood Tennis
Club
 - Rejuva Detox



Clinic Update

This summer's sports are kicking into action. The cricket fields are buzzing with activity and the beaches and pools are full of keen swimmers making the most of the warmer weather.

Despite the warmer weather, **Errol** chose to spend a week in Canberra at the AIS. He was completing the **Level 3 Sports Physiotherapy course** as part of further accreditation in the field. The long days of lectures were supplemented with social events with physiotherapists from around Australia. This new found knowledge has given him much inspiration and drive for 2006.

Amanda was also completing the second half of her Sports Massage Course at Peridor Health Schools in late November, which means she is now a **qualified Sports Massage Therapist**. For **December** only we are offering a **10 % off all Massages** to help you deal with the stress of end of year deadlines and Christmas shopping.

Rachael once again will be heading up to Port Macquarie in early December to **support Northern Suburbs touch football** at the NSW State Championships. Hopefully they will come back with a number of wins! Rachael will also be on holidays from the 23rd December through to the 15th

January. She will be back home in NZ for a couple of weeks celebrating her brother's wedding.

Anastasia will be **away** from the 12th of December until the 23rd of January. She is having **surgery** on her right hand for **carpal tunnel syndrome** and of course she will be an excellent patient doing all her exercises.

We are pleased to **have Jenny Davies as our locum filling in for Anastasia and Rachael whilst they are away**. Jenny has 13 years experience both here and overseas having worked with the Birmingham Royal Ballet. Jenny has also completed her Masters of Sports Physiotherapy.

A big warm welcome to Keran, our new receptionist. Keran's previous experience is at the Golden Door Health Retreat where she was the restaurant supervisor. Her excellent customer service skills means she will be a great addition to our team and ready to help you in any way possible.

As part of our ongoing **community support** we have decided **to donate money** each year to a charity(s). This year our choices were **Medicines Sans Frontiers** and the **Pakistan Earthquake Appeal**. We **thank you for your ongoing support** in order to allow us to do this.

Christmas/New Year Opening Hours

Friday 23 rd December:	8am - 6pm	Thursday 29 th December:	8am - 6pm
Saturday 24 th December:	8am - 12pm	Friday 30 th December:	8am - 6pm
Monday 26 th December:	Closed	Saturday 31 st January:	8am-12pm
Tuesday 27 th December:	Closed	Monday 2 nd January:	Closed
Wednesday 28 th December:	8am - 6pm	Tuesday 3 rd January onwards	normal hours

From all of us at Help St Physio we would like to wish you a happy & safe Christmas & New Year

www.helpstphysio.com

Swimming Mechanics and Prevention of Common Injuries

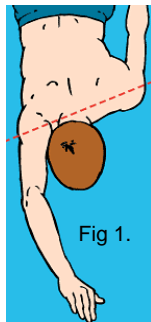
Many Australians take it for granted that they are able to swim. It may be due to our proud history in this sport that we sometimes do not think about the fundamentals of swimming. Like any other sport, swimming technique is of utmost importance in preventing injury and improving efficiency.

An understanding of the freestyle swimming stroke and shoulder biomechanics helps to identify and correct flaws in swimming technique. Sports medicine professionals can implement new prevention strategies and coaching techniques in order to assist with minimising shoulder injury.

Freestyle Biomechanics

The freestyle swimming stroke is divided into 3 phases commonly explained as catch, pull and recovery.

Catch – The normal catch occurs when the front hand enters the water which may be described as a pinky or fingers first entry. A hand entry that crosses the midline of the body or a thumb first entry, places increased strain on the front of the shoulder, possibly leading to pain (Fig1). A proper body roll can help to minimise this with rotation of the mid-line axis being at least 45°. Remember to keep your elbow relatively high so that it does not break the water before your hand.



Pull – Once you have a good hold on the water from the catch, the pull phase begins. It is important to keep your hand relaxed and use of your hand and forearm will create a larger paddle.

Recovery – The recovery phase starts as the hand exits the water usually about the level of the hip and continues through to the start of the catch phase.

Common technique flaws include:

- Insufficient body roll to the side where recovery is taking place which forces the shoulder into extreme ranges of rotation. A conscious adjustment may be sufficient to prevent extra stress on the shoulder joint. If stiffness through the upper back is the issue, then upper back rotation stretches should be performed out of the pool to improve flexibility.

- Legs sitting lower than the torso in the water

causing increased drag. Reasons for this can be a result of general laziness with kicking, poor flexibility in the hips and/or weak abdominal and back muscles. Hip flexor/upper thigh stretches (fig. 2) are important to improve the ability of the hips to extend back. Having stronger stomach and abdominal muscles can reduce the strain on a swimmers back and allow for a stronger kick and hence less drag.



- Inability to get the shoulders/arms in line with the torso. Commonly, this is a result of stiffness in the upper back and poor shoulder flexibility. Stretching over a towel or swiss ball (Fig. 3) can be useful in loosening the joints of the upper back.



Pectoral or frontal chest muscle stretches will also improve overall shoulder flexibility (Fig 4a & b).



Other tips for swimmers:

- Doing internal rotation stretches like hand behind back stretches will allow swimmers to pull through the water easier and more efficiently.

- Being able to breathe on both sides allows the swimmer to use both sides of the neck evenly. It just takes some practice and is worthwhile despite the fact that you may swallow some pool water initially.

- As a swimmer fatigues, they lose form and technique and this is often when injuries occur. Be aware that this is a possibility and either stop or change stroke.

References:

Figure 1. Johnson, J. N., et al (2003). Swimming Biomechanics and Injury Pprevention. The Physician and Sportsmedicine. 31 (1).
Figure 2. Basic stretch – Hip Flexor. Available from: http://ph-atdiet.com/healthier_b_12.jpg. [Accessed 30/11/05.]

Benefits of Massage Pre & Post

Massage therapy is becoming an increasingly popular addition to treatment both pre and post surgery. We know that people who are facing surgery suffer from anxiety at varying levels. Anyone who has had a massage knows how relaxing the experience can be and it's been proven that reducing anxiety levels is a crucial part of increasing the bodies healing mechanisms.

Massage Therapy pre surgery is an excellent way to prepare the body and muscles for the procedure by physically and mentally relaxing the client.

A study at the University Of Arizona College Of Nursing looked at how massage therapy might affect the outcomes of patients undergoing surgery. Laura McRee, RN, and lecturer at the UA College of Nursing designed and implemented a study to determine the effects of massage therapy on the psychological and physiological outcomes of patients undergoing low-risk surgery.

Before and after surgery, anxiety was measured, using a six-item State Trait Anxiety Scale, and cortisol and prolactin levels were drawn. Vital signs (blood pressure and pulse) were tracked for all groups. After the operation, the patient's physical and emotional state were re-assessed, as well as their use of analgesics to control pain. The results showed that anxiety levels for all groups were significantly lower after surgery. However, patients who received both massage and music therapy had a much lower anxiety level and diastolic blood pressure after surgery than those who received no additional therapies.

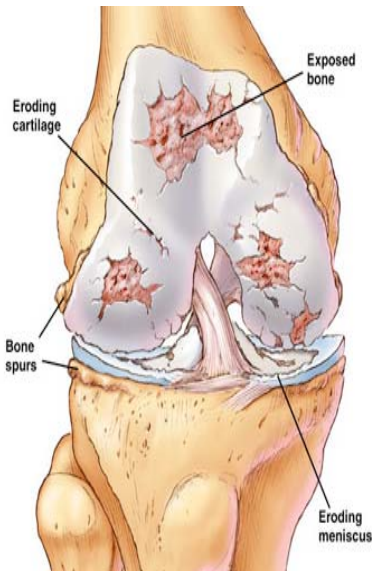
Massage Therapy post surgery reduces adhesions, lessens scar tissue, reduces pain, improves lymphatic flow and increased arterial and venous flow. The benefits of reducing a patient's anxiety level for either elective or emergency surgery are many. Anxiety and pain cause an increase in hormones and metabolic responses that may lead to a variety of

complications, including decreased blood supply to major organs, irregular heart beat, malnutrition, fluid and electrolyte imbalance and decreased wound healing. In addition, anxiety increases oxygen consumption, cardiac output and blood pressure.

Studies have also shown that anxiety and stress can increase the need for higher doses of anaesthetics and sedatives during and after surgery. The use of anaesthesia has become a double-edged sword for the medical profession, contributing to a perplexing problem known as PONV, or post-operative nausea and vomiting. Although several factors may contribute to PONV, anaesthesia is a major player. Aside from the unpleasant experience for the patient, PONV can complicate post-surgery recovery and further compromise the patient's health. While the personal experience of PONV is uncomfortable and annoying, the medical implications can be quite serious. The patient is at risk of complications such as aspiration, dehydration, electrolyte disturbances and disruption of the incision site. Additionally, a longer hospital stay may be required, increasing expenses and demands on hospital staff, and contributing to the patient's anxiety over future procedures.

The Touch Research Institute conducted a study of women with breast cancer who received regular massage and the benefits they experienced. The benefits include decreased anxiety, depression and anger, and an increase in natural killer cells and lymphocytes. Other results show a decrease in swelling, pain, tingling and muscle tightness as well as an increase in range of motion. Paul Reilly, a naturopath at the Cancer Treatment Center in Seattle found that massage therapy can contribute positively by decreasing stress and anxiety and helping people to feel better which can increase the effect of their immune system.

Effects of long term dietary weight loss and exercise in people with knee osteoarthritis



Zimmer. Available from: http://www.centerpulseorthopedics.com/us/patients/knee/arthritis/knee_osteoarthritis. [Accessed 7 Dec 2004]

Knee osteoarthritis can be a debilitating condition which often results in the loss of mobility and general function whilst causing severe pain. It has been reported that for every **5 pounds** that one is **overweight**, the **chances of developing osteoarthritis doubles**.

A study in 2004 was designed to determine whether long-term exercise and dietary weight loss were more effective, either separately or in combination, than usual care in improving physical function, pain, and mobility in older overweight and obese adults with knee OA.

It was found that the **diet plus exercise group had significant improvements** in self reported physical function, knee pain, stair climbing and general walking where as the group that just did exercise only had significant improvements in walking. It was surprising to find that the group that just went on the **weight loss diet alone performed no better than the group which had no intervention**.

In conclusion, "the combination of modest **weight loss plus**

moderate exercise provides better overall improvements in self-reported measures of function and pain and in performance measures of mobility **in older overweight and obese adults with knee OA compared with either intervention alone.**" (Messier SP, Loeser RF, Miller GD, Morgan TM, Rejeski WJ, Sevick MA, Ettinger WH Jr, Pahor M, Williamson JD; Exercise and dietary weight loss in overweight and obese older adults with knee osteoarthritis: the arthritis, diet, and activity promotion trial; Arthritis & Rheumatism 2004 May;50(5):1501-1010)

Latest Research on Patellofemoral Pain

- Another study published earlier this year investigated physiotherapy intervention compared to no intervention for people suffering with **Patellofemoral (kneecap joint) pain**, when performing the task of going up stairs.
- Participants were 40 years or younger and were randomly assigned to one of the two groups.
- Results showed that after the **6 week intervention**, the physiotherapy group had greater knee mobility than those in the no intervention group.
- Those **individuals who were able to turn on their quadricep/upper thigh muscles had greater improvements in knee mobility/movement**.
- It was concluded that **physiotherapy intervention results in significantly greater changes in knee joint mobility** and these changes are partly to do with changes in pain and changes in the timing of quadriceps muscle contraction. (Crossley K, Bennell K, Green S, Cowan S, McConnell J; Physical therapy for patellofemoral pain: a randomized, double-blinded, placebo-controlled trial; The American Journal of Sports Medicine 2002 Nov-Dec; 30(6):857-865)

Introducing our business partners:

Voodoo Espresso

An exciting new opportunity arose for our clinic when this cafe opened within smelling distance. As willing guinea pigs we tried the coffee, tea, the sandwiches, the banana bread, did we mention the coffee? Find out for yourself as Voodoo Espresso is fantastic when it comes to hot drinks expertly made! The service comes with more than a smile; it's a friendly chat in an

energetic yet ambient atmosphere. It is assured that whether you're purchasing lunch, morning or afternoon tea you will be pleased with what Voodoo has to offer. And as we are devoted to you, we have secured a **half price coffee** for our clients when you visit them. Limit of two coffees per person per week. We hope you enjoy their delights as much as we do.



Sit Back and Relax 5% Discount for Help St. Physio Clients



www.sitbackandrelax.com.au

You have been told on numerous occasions that you need better ergonomics but you cannot find the right chair or appropriate support. Why not visit **sit back & relax** in Chatswood.

They have a Healthcare range including ergonomic seating, bedding and massage chairs to

suit everyone. Their experience lies in fitting the right piece of equipment for you.

They also offer a range of other products for home, leisure and travel. Visit their website for more details on products or pop into their store at 1/398 Victoria Avenue Chatswood. Ph: 9411 3400

Rebel Sport



Rebel Sport has kindly offered all our clients a **5% discount** every time they shop at any Rebel store. Just show them the Rebel Sport **mvp** card which you can collect from our clinic and they will give you the discount straight away.

Help St. Physiotherapy Client Card

As a way to say thank you for your continued support, we have developed a Client Card. As a client of Help St Physiotherapy and Sports Injuries Clinic, you are entitled to a range of discounts and savings with our business partners:

- Bone & Joint Clinic
- Voodoo Espresso
- LivingWell Willoughby
- Fernwood Women's Health Club
- Chatswood Tennis Club
- Sit Back and Relax
- Rejuva Detox
- Rebel Sport

Help St Physiotherapy has negotiated a special discount for our clients who join Fernwood Women's Health Club in Chatswood. This exclusive deal means **No Joining Fee** on new memberships and a **free Personal Training session** for Help St Physiotherapy clients. Through our clinic, memberships can be tailored to suit your needs as we have a close working relationship with the team at Fernwood in Chatswood



Level 2, 370 Victoria Ave
Chatswood (access via Anderson St)



The new **Fernwood Women's Health Club in Chatswood** is the ideal retreat for women to develop their fitness in a well-equipped, well maintained and supportive environment. The all-female health emporium offers personal training, weight management and a large range of classes including yoga, Pilates, box, spin and fitball.

Contact Fernwood on **9413 9900** or visit **www.fernwoodfitness.com.au**

Help St Physiotherapy & Sports Injuries Clinic

Ground Floor
7 Help St
Chatswood
NSW 2067

(02) 9413 2979

Fax:
(02) 9413 3316

Email:
info@helpstphysio.com
www.helpstphysio.com

Postal Address:
PO Box 5364
West Chatswood
NSW 1515

Mon-Fri: 8am-6:30pm
Sat: 8am-12noon



RejuvaDetox Free treatment valued at \$99

RejuvaDetox is a new wellness programme which helps men and women achieve **weight loss**, inch loss and **overall body wellness** over a short period of time.

It takes a totally holistic approach to weight loss and well-being, a process of total body rejuvenation and detoxification. A plan with a month long course of treatments – guaranteed to deliver significant inch loss and health improvement.



Rejuva Chatswood is located at Suite 303, Level 3, 815 Pacific Highway, Chatswood.

You can also contact them on **9411 2990** or visit their website, **www.rejuva.com.au**

LivingWell Health Club & Spa VIP membership rate

LivingWell Premier clubs are larger, stand-alone units, offering a full range of facilities that include a gym, aerobics studio, varied group exercise classes, spa, "The Sensory Spa Mind, Body and Soul" salon, child minding, Pro Shop, members lounge and cafe area; plus meeting room, complimentary towels and toiletries.

LivingWell Willoughby is proud to offer Help St Physiotherapy clients with **VIP/corporate membership rates**. Just ask us for an introductory letter confirming you as our client.

They are located at 350 Eastern Valley Way, Willoughby.
Ph: 8962 6000



www.helpstphysio.com