



President's Message

By Tamsin Rossiter

President's Message	1
Secretary's Report	4
News from the Regions	6
Diagnosis: an ongoing process <i>by Susan Davis</i>	8
Corporate Seated Massage <i>by Paul Lindsay</i>	10
The Physiological Effects of Massage <i>by Jeff Murray</i>	13

And so...it's finally come to this. Like that old jar of yoghurt at the back of the fridge, this soon to be ex-president has finally hit her use-by date. And after three years as president I confess I am still oscillating between feelings of nostalgia and elation as I pen my final President's report. I would be lying if I didn't admit that I have been slowly but surely ascending a mighty steep learning curve during my tenure. Yet, after the climb (and I am still far short of the summit), I am wiser, significantly more informed, and even more devoted to AMT and the 'national cause' of the advancement of massage therapy. I feel relief and a degree of sadness but no regrets.

I have Rebecca Barnett and Colin Rossie to acknowledge for placing me at the bottom of the incline back in 2008. In unison, the two 'sneaky panthers' masterminded my recruitment. However, once the seed was planted I embraced my role with sincerity, hard work and dedication. While holding this position was never part of my master plan, I was surprised at how fulfilling and challenging this role has been.

I have been a proud member of AMT since 1993. During nearly twenty years, I have been involved at many different levels in the development of the organisation and the profession itself, not to mention the education and training of massage therapists. AMT is unquestionably the leading massage therapy association in Australia. This is evident in the way we set and maintain standards of practice, our advocacy for the profession, and our commitment to the education and training of therapists.

Our reputation means that we keep neither our mouths nor our minds shut. AMT is regarded as the association that achieves, strives and celebrates. This is no more clearly evident than in the undertaking of writing the national Code of Practice for Massage Therapy.

I feel immense pride and a strong sense of satisfaction as we near completion of our national Code of Practice. This document is extraordinary. It represents AMT's passion for upholding and maintaining rigorous standards. It clearly demonstrates our continued advocacy work and provides the legitimate framework for our profession. This is where you, the members, come in. You are the practitioners who uphold our standards and who avidly participate in professional development and provide the highest level massage therapy care in Australia. I acknowledge and celebrate your dedication.

I am acutely aware of the pitfalls that can form when 'policy writers' devise documents on behalf of the people who 'do the work'. This is positively not the case with AMT. All of our directors are massage therapists. Our comprehensive analysis and feedback process of the COP involved all members and the wider health community. These standards have been written by massage therapists for massage therapists and I salute you all for practising within these standards.

I would never have allowed the sneaky panthers to weave their spell on me had I not had the support and backing of the Board. All directors of the AMT Board deserve great credit.



in good hands

ABN 32 001 859 285

Association of Massage Therapists Ltd

Office hours:
Monday-Friday 10.00am - 4.00pm

Level 1 Suite B,
304 King Street
Newtown NSW 2042

Postal address:
PO Box 792, Newtown NSW 2042

T: 02 9517 9925
F: 02 9517 9952

massage@amt.org.au
www.amt.org.au

Workshops advertised in this Journal are not necessarily endorsed by the AMT. The views, ideas, products or services in this Journal are not necessarily endorsed by the AMT.

There are no egomaniacs and there is absolutely no self promotion. Instead we have a team of extraordinary volunteers who act with generosity, professionalism and a strong ethical commitment to AMT and the profession at large at all times. I sincerely thank Derek Zorzit, Dave Moore, Jodee Shead, Kerry Hage, Annette Cassar and Desley Scott.

Rebecca Barnett gets a very special thanks. As I discussed when I presented Beck with her life-membership award at the 2010 AMT conference in Canberra, Beck is undoubtedly the greatest asset to the Australian massage therapy profession. Beck has selflessly given her support and guidance way beyond the call of duty. In her dual roles as company secretary and director she has not just been my rock, but my mountain. Her knowledge, intellect and wit have sustained and supported me for the past four years. Thank you, sneakiest of panthers.

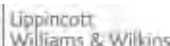
My thanks also extend to all of our regional representatives, supporting our members far and wide throughout Australia. Thank you for your initiative and enterprise in the planning of your regional meetings, workshops and your commitment to promoting both AMT and the profession within your local communities. You do a brilliant job and I thank you on behalf of AMT and your local members.

Thank you to Katie Snell our sensational administrative officer. Katie has an impressive work ethic which is reflected in her achievements and her professional approach to her work. I would also like to farewell AMT's long-serving Executive Officer, Linda Hunter, and warmly welcome new Head Office staff member, Rebekah Short, to our happy and dedicated team. Many of you would have spoken to Bek when she was conducting interviews for our survey in 2010.

I look forward to being involved in AMT's continued growth and development as an organisation. Massage Therapy is peaking in its organisation, growing body of research evidence and acceptance in the mainstream health sector and the general population. This is an exciting time to be a massage therapist and a member of AMT. I thank all of you for providing me with the opportunity of serving as president of AMT, and for your ongoing support and encouragement. I anticipate seeing many of you at our AGM and kicking up our heels at our trivia night.

AMT Preferred Business Directory

Go to http://amt.org.au/index.php?Page=Members_PREFERRED%20Business_1.php for further information on discounts and specials from the following businesses.



PLEASE QUOTE YOUR AMT MEMBERSHIP NUMBER WHEN PURCHASING ONE OF THESE SPECIAL OFFERS



RENOWNED GERMAN TECHNIQUE IN AUSTRALIA

- One of the oldest Meridian Therapies
- Established technique for over 35 years
- Restores health and eliminates pain
- Corrects a 'short leg' and realigns the spine
- Less stress on therapist

DIPLOMA IS DIVIDED INTO 4 COURSES
Course A – May 19th-22nd 2012



AMT accredited



- **DISCOUNTS FOR EARLY ENROLMENTS** •

Call or e-mail for enquiries

Rene or Karen Goschnik

Phone: 02 95470158 or 0411 039 819

E-mail: rene.karen@optusnet.com.au

www.akupunkt-massage.com.au

Akupunkt-Massage
according to Penzel®

MESSAGE THERAPISTS INSURANCE POLICY

Fenton Green, in partnership with the Association of Massage Therapists, have arranged a tailored policy for members.

Policy Features include:

- Discounted Premiums
- Limit options up to \$20,000,000
- Nil excess
- All Claims are handled locally by Guild Insurance and/or their appointed solicitors
- Cover for inquiry costs
- Unlimited Retroactive cover (cover for all past work as a massage therapist)
- Free Run-Off cover (free cover when you retire from practice)
- Cover for locums
- Students covered under the direct control and supervision of the Insured
- Worldwide cover, excluding USA and Canada (practising at home, client premises, medical centre, hospital, clinic etc)



We are pleased to have the Association of Massage Therapists endorsing Fenton Green as their preferred provider of this insurance product.

Fenton Green is a proud business partner of the AMT.

If you have any questions about this policy and/or pricing, please contact our friendly service team on **1800 642 747**

We encourage you to visit our website and request a quote online – www.fgonline.com.au/rh

Level 9 Podium, 530 Collins Street, MELBOURNE VIC 3000
Tel: 1800 642 747
Email: enquiries@fntongreen.com.au
Web: www.fntongreen.com.au

ABN 14 074 775 631 | AFSL 247258



Fenton Green & co

Secretary's Report

by Rebecca Barnett

By now, most of you would no doubt be aware of the call by the "Friends of Science in Medicine" (FSM) to ban the teaching of alternative medicine degrees in Australian universities. The FSM is a newly formed lobby group comprising around 400 medical practitioners and scientists. At the top of their blacklist of degree courses are chiropractic, osteopathy, Chinese Medicine, naturopathy and homeopathy.

Thus far, massage therapy as a treatment discipline has largely escaped the censure of this group of eminent scientists, mainly because massage is considered to be fairly conventional. However, the arguments that the FSM have raised are still of immediate relevance to us because they point to a bigger picture problem in the way healthcare is discussed, delivered and thought about, certainly in Australia but throughout much of the developed world.

Much of the health dialogue is like a wolf in sheep's clothing - the rhetoric of patient care only barely covers a far more sinister agenda based around power, control and money. Patients are at the margins of this dialogue, largely displaced by ideology and vested interest.

Key to the FSM's central argument against alternative medicine degrees is the concept of evidence based practice. Their claims are grounded in the notion that conventional medicine is evidence based and alternative medicine isn't. This may well be an acceptable proposition if it was itself supported by evidence but the base claim is demonstrably fallacious. The Institute of Medicine (IOM), an independent, non-profit organisation that works outside government to provide unbiased healthcare information in the US, reports that well below half of medical care in the US is based on or supported by adequate evidence.

Between 1993 and 2004, there was a more than 80 per cent increase in the number of medications prescribed to Americans. The IOM believes that this boom in pharmaceuticals is outpacing the rate at which information on their effectiveness can be generated.

Perhaps the FSM's call to ban alternative medicine degrees would also be less offensive if it was genuinely based on concerns about patient care and public safety. In turn, their assertion that alternative medicine is not only lacking in efficacy but also unsafe may be more palatable if conventional medicine was completely evidence based, had all the answers and didn't harm anyone. But this, too, is a fallacy.

The reason that the FSM's arguments are so deeply troubling and problematic is that they have little to do with patient care or effective healthcare policy. At the core of this push is power and commerce. But mostly it boils down to commerce. The FSM is yet another manifestation of a raging hegemony that feels threatened by its inability to utterly control patient choices ... this, in the context of a healthcare landscape that is already greatly weighted in favour of that raging hegemony. Conventional medical practice already controls the health spend in Australia at an institutional level but it seems that groups such as the FSM are now targeting the health dollar at the patient level by trying to limit the patient's right to choose. In other words, even the slightest whiff of the health consumer dollar going 'somewhere else' is considered to be a serious threat to the medical hegemony.

It's testament to the extreme nature of the FSM's views that even the Australian Medical Association has officially distanced themselves from the group. Make no mistake - the medical community is not united on this issue.

But any attempt by groups such as the FSM to further undermine individual patient choice should be strongly resisted, regardless of how we might feel or think about some of the alternative practices that have come under their scrutiny. (there's a whole other discussion to be had right there but that might have to wait for another edition of the journal).

The importance of these issues and their relevance to the development of healthcare policy was brought home to me in an intensely personal way with the recent death of my father after a long period of illness. Conventional medicine gave my dad the prodigious gift of 25 years of extra life after a major heart attack in 1987. But it couldn't treat dad's worsening emphysema or even do much to relieve his symptoms. Its limitations became increasingly his last year. A procession of specialist visits for his various systemic and chronic conditions revealed an approach that could only look at dad in discrete segments. With all the best intentions in the world, it's damn nigh impossible for the conventional medical system to look at, think about or treat the whole person. It's just not conceived or set up that way.

A traumatic visit to a skin specialist three days before dad died revealed this problem in a nutshell. Here was a highly trained professional who only examined and engaged with the parts of my father that were already dead. The specialist couldn't even manage to adequately respond to a request from my mother to arrange a palliative care referral, in spite of operating out of a public hospital outpatient clinic. All he was seeing was dad's skin, not the whole person underneath. He was utterly blind to my mother's distress and deaf to her plea for help.

This is not to say that I condemn the conventional medical system or am even ungrateful for the care that my father received. Rather, the point I am trying to make is that, as long as conventional medicine struggles to engage with and treat the whole person, alternative approaches will always be needed. Any non-exploitative practice that fills the gap in whole-person care, if delivered by an appropriately educated person with integrity, has a place in healthcare delivery. This is not an argument for snake oil but rather a statement of support for diversity and an acknowledgement of complexity. I personally think that homeopathy is complete nonsense but if the practitioner is caring and engaged, I would never underestimate the potential effect of the therapeutic interaction. Healthcare practitioners of all disciplines and backgrounds need to accept that much healing happens in utterly unpredictable and fundamentally mysterious or at least impenetrable ways. The power of placebo is the best case in point of this.

Ultimately, science is not about providing the answers but rather articulating the questions and testing the limits of what is known and knowable. It is important that we never lose sight of this and become overly cynical or certain.

I leave the last word on this issue to an old school friend who has had a long and distinguished career as a trauma surgeon, Dr Valerie Malka:

For more than 10,000 years, natural therapies have been used, while conventional medicine is but 100 years old. They deserve the recognition universities have given them as they have healing modalities and benefits proven by credible and peer-reviewed research. The World Health Organisation estimates that more than 80 per cent of the world's population relies on natural therapies to treat, prevent and cure diseases, yet in Australia we have closed-minded colleagues determined to damage and bring into disrepute the entire natural health profession.

Do the Americans have it completely wrong?

Not only do they have dedicated courses in universities but almost 85 per cent of US medical schools offer elective courses in alternative and complementary medicine or include it in required courses.

There is no better than modern medicine when it comes to surgery, emergency and trauma but for almost everything else, traditional, natural or alternative medicine is far more effective - particularly for chronic illness which modern medicine is completely unable to treat or cure. These therapies, unlike modern medicine which focuses on symptom control, work to treat the entire person, recognising and stimulating the body's innate capability to heal the root cause of illness. Modern medicine actually suppresses and thwarts that innate healing mechanism by unbalancing the complex human organism and its systems, particularly the immune system, with the liberal use of drugs and ignorance of the importance of diet and lifestyle.

With conventional medicine's birth came the slow and deliberate move by the medical profession to discredit what became labelled "alternative medicine". I can only presume that what lies at the heart of it is the threat to conventional medicine's power base and the unhealthy relationship it has long enjoyed with the trillion-dollar pharmaceutical industry.

It is about time the Australian medical profession started educating rather than medicating. It is unfortunate that it is the public's disillusionment with modern medicine and its inability to treat many diseases, as well as the dreadful side-effects of any treatment offered, that have increased the popularity of complementary and alternative medicine. It should have been due to the interest, enthusiasm and reason of doctors, scientists, researchers and politicians.

As a qualified medical specialist and surgeon, I am ashamed of the medical profession when it so blatantly displays its ignorance and persists in attacking a profession from which we have much to learn.

Editor's note: I'd like to extend a sincere thank you to Paul Lindsay for his assistance in getting this journal ready for print. He came to my assistance at a time when I most needed support and help. Thank you Paul.

Need CEUs?

Journal question -
March edition

Which muscle did Jiman et al target when conducting research into the effect of ischaemic pressure?

Please write your answer in the space provided on your CEU record sheet and retain it until you submit the form with your annual renewal. Blank CEU forms can be downloaded from:
http://www.amt.org.au/index.php?Page=Members_CEU_1.php

The e-Journal^{club}

Join AMT's e-Journal club and be in the running for a great prize every quarter.

When you opt in to receive the AMT journal electronically, you instantly become a member of AMT's e-journal club.

Just send an email to AMT Head Office and write "Electronic Journal" in the subject line.

News from the regions



Hunter by Paul Lindsay

Our November meeting was an informal workshop as the planned guest speaker was unavailable. I demonstrated the use of Microsoft Onenote to store massage documents, pictures, video clips, internet links, external links and emails etc. The program is easy to use and makes it simple and quick to retrieve articles to show clients or for your own information. This was then followed by a demonstration from Jean Pearce on the use of hot stone techniques to enhance massage results. I also demonstrated some chair massage techniques.

On 25 November, I attended the WEA Awards Ceremony to present the AMT prize for Certificate IV Massage Student of the Year to Amy Biggs. The WEA will be actively promoting involvement in AMT branch meetings in 2012 and we hope to see some new members as a result of this.



▲ Paul Lindsay presents Amy Biggs with her award for Certificate IV Student of the Year at WEA Hunter

Wade Boeree spoke about the "Scenar Advantage" pain relief system at our January meeting. He described the Scenar process with personal stories of successful treatments, and showed examples of the equipment used. Interest was high with an excellent attendance for a January meeting.

Our next meeting will be held on the 25 March where we will discuss the results of the AMT AGM and the regional delegates conference. This will be followed by our guest speaker, Louise Maye, a senior podiatrist with NSW Department of Health, who will talk about problems and care of feet.



Riverina by Jodee Shead

Riverina branch is planning on a busy year in 2012. There was a lot of interest in our last wet lab tour last year and another is being planned.

Our first meeting for the year was held in February. Kathryn and Roger Simm were hosts and a local chiropractor was guest speaker.

If you are a member of the Riverina branch, please do not be a stranger. Let us know where you are and what you would like from the meetings. They are a fantastic way to network with your colleagues. At each meeting, members decide on the date of the next meeting, the agenda and the topic for the guest speaker. Please let Jodee know if you plan on attending any of our meetings.

Chairperson - Nicole McKenzie
Email: scottmckenzie13@bigpond.com

Secretary - Jodee Shead
Email: moweld@bigpond.com

Treasurer - Warren McCormick



Sydney South by Maria Earley

Thank you to all active members of Sydney South Branch who have attended meetings during 2011 for your support and contribution towards the continued growth of the branch. We wish all local members a healthy and prosperous 2012.



▲ South Sydney branch members at the February branch meeting

The following dates have been scheduled for this year's meetings. Please pencil these dates in your diary:

- 4 April 2012
- 6 June 2012
- 1 August 2012
- 3 October 2012

We look forward to seeing many of you at these meetings and encourage you to invite others to attend. These meetings give everyone an opportunity to get together and discuss what is happening within our Association and the profession. Attendance gives you 15 CEUs.

Contact:
Maria Earley
Email: maria_earley@hotmail.com
Mobile: 0419 241 258



FIRM·n·FOLD MASSAGE EQUIPMENT

Superior style, quality and comfort... just relax with a Firm·n·Fold table

Much more than just massage tables, Firm-n-Fold have been supplying quality equipment and accessories to the massage and natural therapies industries for over 25 years. Our web store has over 300 products online.

Browse in one of our showrooms and join our customer reward programme to receive free gifts and discounts on every purchase.



www.massageequip.com

Brisbane · Melbourne · Sydney · Gold Coast · Ph. 1800 640 524

Certificate in Paediatric Massage Consultancy

with the Infant Massage Information Service

- ✓ Internationally accredited qualification (IARC)
- ✓ Run private appointments or classes with parents
- ✓ Teach massage for infants and children
- ✓ Ongoing support following training
- ✓ Hospital based training programs
- ✓ Professional, comprehensive program
- ✓ Referrals available post course

"Very informative, well set-out and great use of time. Very practical, enabling you to feel confident by the end of the course." S.Fox



infant
massage
information
service



MidPLUS

Contact: 1300 558 608 or www.babymassage.net.au

Diagnosis: an ongoing process

by Susan Davis MCSc, BHSc, RN, RMT

Recently I had four new clients attend the Davis Health Centre for remedial massage treatment. I found what I thought to be an interesting, common theme in treating these clients: that the first diagnosis of their presenting condition, even from a medical practitioner, was not necessarily the final or complete answer. Below I have provided a series of case examples that underscore the fluid nature of medical diagnoses.

Case 1:

Female client, 70 years old, generally fit and exercises by walking 5-6 times a week. The client requested massage for a sore lower back. About 3 to 4 weeks previously she had acute hip and groin pain. The pain she reported was not from an injury and radiated from the hip area medially to her knee. She saw the doctor and was advised to have a cortisone injection under ultrasound. The injection was done a day later and the hip pain went away. However, since the injection she has complained of lower back pain. She attributed this pain to the hard x-ray table and the positioning during the injection. I decided to enquire further and eventually she added that she also had 'flu like symptoms', headache and her eyesight was bothering her. This constellation of continuing symptoms prompted me to refer her back to her GP for another assessment.

Case 2:

Male client, 73 years old, keeps fit by playing tennis 3-5 times a week and walking daily. He has had regular massages over the years for fitness and management of an old back injury that occurred when he was 30 years old. In one consultation, he complained of pain in his wrists that "had just got sore for no reason" and shoulder stiffness.

His wrists were stiff with a limited range of movement, though not swollen. He was complaining because he couldn't play his tennis. He also reported difficulty in sleeping, feeling "off", tired and not hungry. This collection of symptoms possibly indicated a general inflammatory condition. Even though the massage treatment produced a considerable amount of relief from the stiffness and pain, I was still concerned enough to refer him for additional medical testing.

Case 3:

Female client, aged 62, is a regular gym junky and fitness nut. She comes for massage irregularly for wellness. She reported that she had woken up with pain in her right hip about 2 to 3 weeks ago and had been to her GP and the physiotherapist for assessment and treatment. She was diagnosed with 'bursitis of the right hip'. My examination showed no restriction in movement but generalised pain (medially and radiating into the groin area) which made it difficult for her to walk. During the treatment she reported she was not sleeping well and feeling 'sore' all over (she thought the massage was a good idea to treat these other symptoms!). She also said the treatments and exercises from the GP and physiotherapist had not helped and her hip was very sore at times. The massage gave her considerable temporary relief from her pain. I recommended that she return to the doctor for further medical evaluation.

Case 4:

A female in her early sixties presented with a similar story of proximal pain and stiffness in the thoracic and pelvic girdle. The stiffness was worse in the morning, non-specific in origin, though could be blamed on lack of exercise, poor posture or overuse etc.

She also complained of flu like symptoms including mild fever, headache and tiredness (but unable to sleep). Appetite loss and a general feeling of ill health were not acute so were disregarded by the client as secondary to her muscle pain and not reported to her GP.

Differential diagnosis

All the clients described above thought that the general wellness symptoms were separate from the non-specific muscle pain issues. Mostly they thought their symptoms were related to aging.

In fact, all four clients were diagnosed with polymyalgia rheumatica, a common clinical syndrome of unknown cause found in people over fifty years^{1,2}. There is no definitive test for polymyalgia rheumatica but it is diagnosed by blood test - erythrocyte sediment rate (ESR)³ and C reactive protein (CRP) levels⁴, clinical symptoms, and the quick response to the preferred medication, glucocorticoids or corticosteroids e.g. Prednisone. These medications can result in reduction or elimination of musculoskeletal and connective tissue symptoms. However even though the symptoms are reduced, treatment can last for 2-6 years depending on the individual's immune recovery, since damage or disruption to the immune system can take considerable time to correct itself.

What is interesting for us, as massage therapists, is the similar relationship between the symptoms of polymyalgia rheumatica and a commonly treated condition in our clinics - Fibromyalgia. We hear all the time in articles and in professional discussions that it is hard to diagnose Fibromyalgia because of its similarities to other conditions.

Fibromyalgia and polymyalgia rheumatica are both characterised by muscle pain and thus have similar symptoms. Polymyalgia rheumatica is an inflammatory disease of the synovial and connective tissue, suspected to be autoimmune in nature. Fibromyalgia in essence is not an inflammatory condition but an abnormal sensory processing in the central nervous system. Both conditions are found in males and females, however polymyalgia rheumatica is rarely found in people under the age of 50 years, with 70 years being the average age of onset.

The similarities between the two conditions are:

- muscle pain in the neck, shoulders and hips
- stiffness worse in the early morning that gets better as they move around
- fatigue and depression
- sleep difficulties

Also, some fibromyalgia sufferers have flu like symptoms.

The differences between the two conditions are that polymyalgia rheumatica sufferers also report loss of appetite, possible weight loss and inflammation.

The four clients described above did not have visible swelling in their muscles or tendons, which is often present in polymyalgia. However, their blood tests definitively indicated they had an inflammatory process occurring. The blood tests of fibromyalgia sufferers rarely indicate an inflammatory process unless they have a secondary infection.

Clearly, an accurate differential diagnosis is important to ensure that the treatment is appropriate to the condition and referral to a GP is crucial. Polymyalgia rheumatica is treated with corticosteroids and evidence has shown that this is not well tolerated by fibromyalgia sufferers². The treatment for fibromyalgia differs totally to polymyalgia rheumatica and includes exercise, relaxation techniques, analgesia and antidepressants to relieve pain and promote sleep.

In my experience, remedial massage combined with good communication with your client about their pain thresholds is helpful in both conditions.

As healthcare providers, it is important to be aware of the correct diagnosis. For example, 15% of polymyalgia rheumatica conditions can develop into a potentially dangerous condition called Giant Cell Arteritis that causes inflammation of the arteries that supply the head and can cause blindness. I am confronted every day with clients seeking massage therapy for what, in their mind, is a minor problem. Appropriate vigilance and observation is a critical part of ensuring that apparently minor symptoms don't point to something far more serious. One of the keys is to ask questions that may seem beyond the usual general consultation interview. Another key is to be aware that diagnosis is an ongoing and dynamic process.

Susan Davis is owner and senior remedial massage therapist at The Davis Health Centre in Sydney. She has been in practice for more than 30 years. She is a registered nurse, and holds degrees in health science and lifestyle medicine. Her Masters degree research focused on the relationship between mild muscle pain, sleep problems and the possible connections with early inflammatory disease. Her proposed PhD thesis will be an examination of the nature of massage therapy practice in Australia. She hopes to influence the way in which massage therapy is researched in the future.

References

1. Salvarani C, Macchioni P, Boiardi L. Polymyalgia rheumatic. *Lancet*. 1997; 350:43-7.
2. Salvarani C, Cantini F, Boiardi L, Hunder GG. Polymyalgia rheumatic and giant-cell arteritis. *New England Journal of Medicine*. 2002; 347:261-71.
3. Ellis ME, Ralston S. The ESR in the diagnosis and management of the polymyalgia rheumatic/giant cell arteritis syndrome. *Annual Rheumatic Diseases*. 1983;42:168-70.
4. Mallya RK, Hind CRK, Berry H, Pepys MB. Serum c-reactive protein in polymyalgia rheumatica. *Arthritis Rheumatology*. 1985; 28:383-7.

AMT Member Representative

Ever wondered what goes on during an Executive Board meeting?

Ever feel like there is a gap between the Board and the membership that needs to be bridged?

Ever wanted to ask a Director a question but wasn't sure who to address it to?

We have a solution!

Enter Michelle McKerron, who is taking up the challenge of a new role as AMT's Member Representative.

Michelle has been a member of AMT since 1996 and manages a small clinic in the south of Sydney. She has been actively engaged with where AMT is heading throughout her whole career as a massage therapist and is now adding to her skill set, participating in AMT Board meetings. She will be acting as the eyes and ears for you - the members!

You can contact Michelle at memberrep@amt.org.au with any questions or feedback you have for the AMT Board.

Corporate Seated Massage – some tips

by Paul Lindsay

Corporate massage is an area of our profession that is rapidly growing, as employers search for ways to improve employee productivity and reduce sick leave. Conditions vary between organisations, with some employers subsidising massage while others require employees to pay for their massage and make up the time.

I have just completed a year of (mainly) seated corporate massage with NSW Department of Health staff, and these are my tips if you wish to enter this growing field:

- **Seated massage does not mean relaxation massage.** Many clients will come to you with specific problems, commonly neck pain from a forward head posture, headaches or backache. If you do the same relaxation routine for all of them you will lose clients. Learn to do remedial massage in the chair.
- **Seated Massage is not table massage in a chair.** To be effective, seated massage requires some different techniques. There are a number of books and DVDs available on seated massage. I recommend "Seated Therapeutic Massage" by Ralph R. Stephens, available as a three DVD set through Amazon for around \$US45 plus postage, along with the book version "Therapeutic Chair Massage" by the same author, available from fishpond.com.au for about \$AU45 with free postage. (This is an American author and the techniques described as 'therapeutic' equate to what we would call 'remedial').
- **Check your gear.** Like your massage table, your massage chair should be regularly checked for loose bolts or wear. The last thing you need is to be sued by someone because your chair (or table) collapsed.
- **Bag it.** If you have to move your massage chair a lot, invest in a carry bag to avoid damage. Your bag will deteriorate if you have to stand it in a car park or on concrete so check it regularly for wear. Minor damage to some threads can be repaired with a blob of hot melt glue pressed into the fabric with something metallic. Holes are best repaired with patches of leather (e.g. old belts or gardening gloves) glued on with hot melt glue or contact cement.
- **Know your stuff.** If you are doing 15-minute massages you don't have time to throw in some effleurage while you work out what to do. Practice your techniques so you can perform a good massage in the limited time.
- **Revise your documents.** Are your client details, medical history and postural assessments quick to fill in? Could they be simplified? Every extra minute used to fill in forms eats into your turnaround time. If you take bookings by email, consider sending your client intake form to new clients by email so they can save time by filling it in before they arrive.
- **Don't skimp on turnaround time.** For my first day I planned to do 15-minute massages on a 20-minute turnaround (which I had managed with voluntary massages). It was a disaster! I hadn't allowed enough time for postural assessments, complex medical histories or recording the treatment done. The only way I could avoid running hopelessly late was to cut into the massage time ... and the clients noticed. Only one client came back for another session. Now I work on a 30-minute turnaround, and assessments and taking money are not in the massage time. A 15-minute massage means 15 minutes in the chair and my re-booking rate is now acceptable.
- **Determine what the client wants at the time of booking.** I had a client make a booking and then when she arrived she wanted a foot massage. I could have used the spare chairs that were in the room but I had no lubricants or towels with me. I offered her a neck and shoulder massage at a reduced rate – which she accepted – but she didn't come back. Some clients also want a table massage. If you ask what kind of massage they want at the time of booking you can be prepared.
- **What extras can you provide?** If you use a portable computer for your records, consider also adding some music and an externally powered speaker system to relax your clients. I offer my clients a choice of three music genres – massage music, light instrumental or classical – all chosen for their generic appeal (your taste will not be the same as your client's. Serenity Music has a good selection). I also have Microsoft OneNote loaded with sketches of muscles, bones, exercises and conditions (e.g. scapulae winging) so I can quickly show a client to illustrate a point.
- **Make a checklist of the equipment you need.** It is very easy to assume everything is fine then discover that you've run out of hand steriliser or assessment sheets, or you don't have enough receipts for all the treatments. By running through a checklist each time you pack your gear, you will quickly discover if you have everything and if you're about to run out of something. These are the items I suggest:
 - Antiseptic solution, such as 'Viraclean', or antiseptic wipes to clean your chair after each client.
 - Appointment cards for rebooking clients.

- Cash box or 'bum bag' with adequate change. If you are charging \$15 you will need a lot of \$5 notes, and some 10s and 20s. If you charge \$20 you won't need 5s. I suggest you keep enough change (called a 'float') to handle three \$50 notes.
- Business cards and flyers. You might get a customer who wants a longer massage at your clinic.
- A clipboard for filling in forms (mine has useful 'muscle man' drawings on it).
- A clock and battery. Not all rooms you use will have a clock. Take a small clock with you, preferably digital. I purchased mine from the automotive section of a large store for \$5. It is small and runs on one AAA battery but has large numbers that are easily readable from several metres away.
- A cup, tea, coffee etc, if you want to have a break.
- Disposable gloves. Some sterilisers for your chair can irritate the skin and the use of gloves is recommended.
- Face pads. These are a square of soft paper with a hole in the centre for your nose and mouth. They only cost a few cents each and look more professional than a paper towel with a hole torn in it. I find the hole a bit small, so I tear through the pad where the chin is and turn the two torn edges underneath so it becomes the same shape as the face cradle. They are available from massage equipment suppliers and medical suppliers (dentists use them).
- Hand cream and talcum powder. Useful in case someone wants a hand or foot massage.
- Hand sanitiser. You must sanitise your hands before and after touching any client.
- Lunch. Ensure you allow yourself a break for lunch. If there are no food facilities nearby, take some lunch with you.
- (Optional). Notebook, mouse and mat (if used), speakers and power pack, small extension cord (3 metres) or power board with a long lead. For regular clients, I enter the details directly to my notebook; for new clients I use a paper record which I transfer to computer later. Remember to back up any computer records.
- Massage chair. OK, it sounds silly but, if you are running late and have thrown everything you think you'll need into a bag, it's easy to overlook the most important item.
- Nail file, just in case you damage a nail.
- Paper toweling. Used to cover the armrest and to wipe down after sanitisation. Choose a good quality product with soft absorbent paper. My preference is "Handee Ultra" double length.
- Pens and stapler or paper clips for your records. If you use more than one record sheet, it's easy to forget to put the client's name on every sheet at the time. If you haven't clipped them together by the end of the day you will forget which record applies to which client.
- Receipt book and list of health fund provider numbers. Check that you have enough receipt pages left before the day's work begins.
- Record sheets. I carry Client Intake, Postural Assessment and Consent forms, stretching instructions, a list of health fund provider numbers, and a copy of the Health Care Complaints Commission contact details (which I hope I never use). You can buy a pocketed document holder for a few dollars from a stationery supplier. These are ideal to keep the sheets organised.
- Toothpaste and brush. If you eat lunch during your massage sessions, clean your teeth. Your client doesn't want to know what you had for lunch from your breath.
- A water bottle. Stay hydrated!

So there you have my tips. You won't make a fortune out of corporate massage because assessment and record keeping time is too high in proportion to the massage time but it is a great way to hone your skills and build your confidence if you are just starting your career. Happy massaging!

Paul Lindsay is a Senior Level One member of AMT and Secretary of the Hunter branch. He does corporate seated massage at Hunter New England Health's Wallsend campus and private massage from a clinic at his home.

DEADLINE

**Deadline for the
June 2012
issue of
In Good Hands is:
1st May, 2012**

Please email
contributions to:
journal@amt.org.au
or phone: 02 9517 9925

The e-Journal^{club}

Congratulations to:

MARK MOORE
Winner of our March
e-journal club prize.

Thanks to Elsevier
for donating Mark's prize.



Enrol now!
to discover the benefits of pregnancy massage with these great courses offered by **PREGNANCY MASSAGE AUSTRALIA**

CERTIFICATE OF PREGNANCY MASSAGE	2012 Course Dates - 2 days
This course will help you understand the many physiological, structural and psychological changes that occur in a woman's body during pregnancy. You will also discover how beneficial massage is before, during and after labour.	Melbourne 17th & 18th Mar
	Brisbane 28th & 29th Apr
	Melbourne 28th & 29th May
	Perth 16th & 17th Jun
	Sydney 21st & 22nd Jul
ADVANCED CERT OF PREGNANCY MASSAGE	2012 Course Dates - 3 days
The Advanced Certificate will help you gain a greater insight into why massage is a key component to maintaining good health and wellbeing during pregnancy. You will also learn exercise and relaxation techniques, proactive partnering during labour, and visualisation methods to achieve a strong mother-baby connection.	Melbourne 19th, 20th & 21st Mar
	Brisbane 30th Apr, 1st, 2nd May
	Melbourne 30th, 31st May, 1st Jun
ADVANCED 1-DAY WORKSHOPS	2012 Course Dates
Post Natal Massage	Melbourne 22nd Mar
Partner Training & Massage for Labour	Melbourne 2nd Jun

Accreditation:
 MidPlus 14 points
 AAMT 20 points
 AMT 60 points
 ATMS 16 Points
 MAA 20 points
 Massage Australia
 ANTA
 BCT

For more information contact Pregnancy Massage Australia
 ph: 03 9532 8144
 web: pregnancymassageaustralia.com.au
 e: info@pregnancymassageaustralia.com.au

 Find us on Facebook



Terra Rosa
www.terrarosa.com.au
 Your Source for Massage DVD

We have the largest & best collection of massage books & DVDs

Advance Your Knowledge & Discover New Possibilities

More than 200 DVD titles in stock

Myofascial Release, Deep Tissue Massage, Anatomy, Trail Guide to the Body, Neuromuscular Therapy, Anatomy Trains, Myoskeletal Alignment, OrthoBionomy, Positional Release, Craniosacral, Polarity Therapy, BodyReading, Visceral Manipulation, Stretching, Orthopedic, Lymphatic Drainage, Sports, Esalen, Nerve Mobilization, Stone, Pregnancy, Infant, Reiki, Lomi Lomi, Equine, Canine, Fibromyalgia, Chair, Ayurvedic, Shirodara, Shiatsu, Acupressure, Thai Massage, TuiNa, QiGong, Tai Chi, Reflexology, Zen Shiatsu, Yoga, Spa, Beauty Therapy and more

Visit www.terrarosa.com.au
 Or Call 0402 059570 for a free catalog



Sydney Institute of Traditional Chinese Medicine
 CRICOS 01768K NTIS 5143

Your New Professional Health Care Career:
 Acupuncture and Chinese Herbal Medicine

Enrol into Sydney Institute of Traditional Chinese Medicine (SITCM)

Delivering practical courses:

Bachelor Degree of Traditional Chinese Medicine
 (double modalities of acupuncture and Chinese herbal medicine)
 Approved by AUSTUDY,
 Recognized by major Health Funds

- ◇ 28 years since establishment with graduates successfully practicing nationally and abroad with employment rate over 90%.
- ◇ National TCM registration on 1 July 2012.
- ◇ Government support TCM & WM integrated medical centre will be opening in Sydney.
- ◇ Hospitals can invite registered practitioner to treat patients
- ◇ Limited seat for international students.

We are in the city: Level 5, 545 Kent St., Sydney NSW 2000
 Tel: 02 92612289 Email: Administration@sitcm.edu.au
 Web: WWW.Sitcm.edu.au

The Physiological Effects of Massage

by Jeff Murray

Massage therapy is a reflexive form of treatment in which we create changes by mobilising skin, connective and muscular tissue, resulting in mechanical acceleration of venous blood drainage, lymphatic drainage, and the breakdown of deposits of calcium in soft tissue, stimulating its removal from the body (Prilutsky 2009). The pressure used also deforms the proprioceptors in the muscle spindles and Golgi tendon organs creating action potentials via electrical and chemical impulses that travel through neurological pathways to reach motor and vasomotor centres. As a reflexive response, the body reacts by expressing a range of physiological effects, depending on the stimulation administered.

The appropriate level of palpation pressure is determined by the desired outcome we wish to achieve in treating a particular region, set of tissues or presenting condition. To achieve the most profound physiological effect(s) on the body, massage should be performed as deeply as possible (with some caveats). The deeper we massage, the more we stimulate the nervous centres. Larger amounts of endorphins will be produced and more reflexive therapeutic effects will occur at a faster rate (Prilutski 2009). Caution is required not to create a myotatic (stretch) reflex by being too invasive or aggressive. If we apply very strong pressure and activate the pain analysing system, we invoke reflexive protective muscular contraction. The appropriate approach is to work judiciously, gently allowing the tissue to become accustomed to your palpation, creating heat, changes in viscosity and general acceptance. This is known as an inhibitory technique.

The following details some of the physiological changes that occur during massage.

Action potential

Every nerve receptor has the capacity to produce an electrical activity known as an action potential. As with all skeletal muscle, there is a voluntary command for the muscle to contract. Communication between the nervous system and a skeletal muscle fibre occurs at the neuromuscular junction (NMJ), which contains the highly sensitive and proprioceptive Golgi tendon organs. Each skeletal muscle fibre is controlled by an individual neuron at a single neuromuscular junction midway along the fibre's length. A single axon branches within the perimysium forming further branches, which end at the synaptic terminal. The cytoplasm of the synaptic terminal contains mitochondria and other vesicles filled with acetylcholine (ACh). This ACh is a neurotransmitter and when it is released from the synaptic terminal it can alter the permeability of the sarcolemma to sodium. When the membrane reaches a voltage (potential) of -100mV an influx of sodium ions occurs followed by a depolarisation spike, which reduces the membrane potential by 35mV from -100mV to -65 mV and triggers a muscle contraction. This is then known as the action potential. The link between the triggering of an action potential in the sarcolemma and the start of the muscle contraction is called the excitation-contraction coupling. (Marieb 2009).

Upon this voluntary command the sarcoplasmic reticulum releases calcium ions (Ca^{2+}) into the intercellular fluid of the cell, or cytosol. Once the Ca^{2+} is in the cytosol, it then binds to a protein called troponin, whose function is to hold tropomyosin in position to block myosin binding sites on actin. Once the troponin has been activated by the Ca^{2+} , the tropomyosin is released from the myosin binding sites on the actin, and the contraction cycle begins (Marieb 2009).

Gunn (2011) reports that acetylcholine slowly depolarises supersensitive muscle membranes, inducing an electromechanical coupling in which tension develops slowly without generating an action potential. This explains why muscles in trauma have the ability to contract at a lower level action potential than healthy muscles. In healthy muscles, acetylcholine acts only at receptors that are situated in the narrow zone of innervation, however in neuropathy it acts at newly formed extra-junctional receptors known by therapists as 'hot spots'.

Approximation and passive relaxation

When massage therapists apply too much pressure and hurt their clients, they create an action potential and cause muscles to contract. If the affected muscle is also operating at a lower action potential as described previously, contraction will be initiated at lower levels of pressure. To quote Dr Myk Hungerford (2006) "why would a therapist want to violate the nervous system in such a way, to force a tight contracted muscle to tighten even further?"

Dr Hungerford was a firm believer in the osteopathic technique known as approximation whereby passive relaxation of the muscle spindles allows a resetting of tension. When performing approximation, the therapist places the symptomatic joint in the position of least discomfort while monitoring the degree of tenderness at a nearby tender point. To establish the position of ease (PoE), the therapist incrementally approximates the affected joint by around 2 cm at a time. During each stage of approximation, the client is asked for feedback regarding levels of discomfort.

In Dr Hungerford's explanation the initial starting point of approximation is 'position 1' and the end of each approximation is 'position 2', and the client is asked which position they prefer.



Interestingly, she never uses the word pain or discomfort. Approximation will continue until the client reveals the maximal position of ease (PoE). This PoE of minimal discomfort is usually a position where the muscle is at its passively shortest length.

In the above picture the therapist is approximating the hamstring at the ischial tuberosity. Note how the thigh is extended and the hands are approximating the hamstring above and below the ischial tuberosity. (Picture taken from Tricks of the Trade DVD, presented by Jeff Murray.)

The position is held for 90 seconds to allow for a total relaxation and resetting of the Golgi tendon organ (GTO,) and then the joint is slowly and passively returned to the neutral position. This prolonged shortening of the muscle causes shortening of both the intrafusal (muscle spindle) and extrafusal fibres. The gamma motor neurones then increase their firing rate to maintain tone in the muscle and the muscle spindle fibres become hypersensitive. If the hypersensitive muscle is now lengthened too rapidly, a reflex overstimulation of the alpha motor neurones will occur (Hungerford 2006).

Gunn corroborated this phenomenon in his research regarding contraction of the striated muscles leading to the evoked shortening of a muscle fibre in the absence of an action potential. Hungerford (2006) considered this stimulation to be an insult on the neural system causing sensory input to travel to the higher centres of the central nervous system which, in turn, may misinterpret this input and respond with excessive gamma motor stimulation, maintaining the spasm.

Rhythm of Massage

Rhythm of massage strokes can also affect the electrical impulses to the effected muscles. We know that slow deep rhythm lowers excitation and muscle stimuli and, conversely, fast shallow rhythm increases stimuli. This explains the different techniques applied to athletes depending on whether you are working in pre, maintenance or post-race conditions. Prilutski (2009) suggests that, when performing a maintenance style massage, the rhythm should be around 70-80 movements per minute and the technique application on the massaged area should be prolonged while gradually increasing pressure. This prolonged application creates a continuous flow of afferent electrical impulses from the massaged area.

At this point, the membranes of the nervous cells become repolarised, unable to generate or conduct efferent impulses. As a result, the tension in the soft tissues of the massaged area is reduced. Reflexively, the body responds by vasodilation, a reduction of pain sensation and muscular relaxation. This approach aims at reducing the sympathetic tone and restoring balance between the sympathetic and parasympathetic divisions of the autonomic nervous system.

As we continue to apply inhibitory techniques to an area, the more superficial soft tissues relax, allowing us to work into deeper and deeper layers of tissue. The deeper we mobilise, the greater the amount of receptors we can stimulate.

According to Erik Dalton (www.structural-integration-techniques-2041051 Sighted 24 August 2011), the closer to the bone we can work, the more receptors we can stimulate to create a relaxation response. Rolfers use this style of deep work because there is a lot of tissue-like tendons, fascia, ligament and muscle bidding for space on the periosteum of the bone. The more receptors we stimulate, the greater the therapeutic effects. (Prilutski 2009)

Activation of the Pain Analysing System

To achieve intended results and avoid injury from applying too much pressure, we must ensure that we are constantly discussing pain thresholds or preferred PoE with our clients, searching for feedback regarding pain, preference and/or pressure. I have grave concerns about therapists who palpate so deeply and heavily that they cause undue pain for their clients. Some massage therapists make no distinction between strong massage and deep massage. There is no doubt that deep tissue massage feels stronger but it does not need to be so painful that it creates chemical and neural responses that negate the purpose or intent of the treatment. We need to remember that pain is a highly subjective experience. Determining a client's subjective experience of pain can be achieved by use of a Visual Analogue Scale (VAS) of Pain (see references).

Sometimes, we may come across what I term 'the meat head mentality' (that is, if it doesn't hurt, it can't be doing any good). If the applied pressure is causing a protective muscular contraction reflex, you must reduce the pressure and restart the process, even if the client encourages you to continue or increase the pressure. Remember, pain is the body's protective response mechanism. We are after tolerable therapeutic pain, not intolerable reflexive pain. Uncontrollable spasms, sweating and/or nausea are all signs of trauma resulting in shock.

If we apply strong pressure that causes an involuntary response, we have activated the pain analysing system thereby traumatising the neural and muscular systems. Brukner (2009) states that "with every injury there are three components: neural, muscular and joint."

Working too strongly could cause trauma to all or some of those components, thereby possibly causing inflammation of the muscles, nerves and joints either individually or collectively. This dysfunction can then lead to the development of trigger points within the muscles and other pathologies of the muscular system.

By gradually applying pressure we not only avoid injuring the client, we also relax the superficial layers of tissue that allow us to mobilise the tissue to the deepest possible extent.

The Gamma Motor System

The gamma motor system controls resting muscle tone via muscle spindle fibres. Muscle spindle fibres are specialised muscle cells that are sensitive to stretch. They are located within the belly of the muscle, lying parallel to the regular muscle fibres. If a muscle is traumatised, either by being over strenuously palpated or stretched too long or too quickly, the muscle spindle fibres are stimulated and send an impulse via sensory neurones into the spinal cord. These sensory neurones synapse with lower motor neurons (LMN) and cause them to send a signal for contraction to the regular muscle fibres of the muscle and its synergists. This is a protective mechanism to ensure the muscle and its associated tendinous unit is not compromised.

When the muscle contracts toward its centre (sliding muscle filament theory relating to the actin and myosin fibres, Marieb 2009), it is no longer stretched, preventing it from being overly stretched and torn. For this reason, the muscle spindle reflex, also known as the stretch reflex, is viewed as a protective reflex. When we consider this protective reflex it therefore raises concerns for the muscle being massaged in a stretched position. It could be argued that this style of massage technique should only be used when a particular muscle is inhibited and requires neural activation and tonicity.

The critical aspect of this mechanism is that the sensitivity of the muscle spindle fibres can be set by specialised LMNs known as gamma LMNs.

These in turn are controlled by gamma upper motor neurons (UMNs) that are located within the brain and operate subconsciously. When this gamma motor system of the brain orders the muscle spindle fibres to contract and shorten, they become less tolerant of being stretched and therefore more apt to trigger the muscle spindle stretch reflex.

The stretch reflex will then cause the muscle to contract and tighten to match the tone of the spindle fibres within. On the other hand, if the gamma motor system does not contract the muscle spindle fibres they will be longer and more tolerant to being stretched and less likely to trigger the stretch reflex. Once again if we consider the 'meat head mentality', there is a tendency for some people to stretch to pain. This is the client who is constantly stretching and receiving massages but does not seem to be getting any more flexible. Therapeutic thresholds when stretching must be encouraged otherwise the muscle spindle fibres are stimulated and send an impulse via sensory neurons into the spinal cord. (Marieb 2009) According to Barral et al (1999) damaged muscles following a trauma leads to the deformation of the sarcomeres in the longitudinal and sometimes transverse direction. Therefore deformation of the sarcomeres may prevent the actin and myosin filaments from sliding, and cause abnormal stimuli leading to abnormal muscle tension.

These sensory neurons synapse with lower motor neurons (LMN) and cause them to send a signal for contraction to the regular muscle fibres thereby negating the beneficial effects of the stretch. Shrier and Gossal quote research from the 2004 Sports Injury Bulletin literature review which posits that, to achieve the best results from stretching, there needs to be efforts of low intensity commencing at the pathological level of muscle resistance and long sustained efforts with a duration of around 20 to 30 seconds to achieve maximal and lasting results. The rationale behind this technique supports and confirms the effects of the gamma motor system.

Obviously, the protective gamma motor neuron system does not differentiate between stretching trauma, massage trauma or injury trauma. To the body, trauma is trauma. As such, the body maintains an inbuilt protective mechanism beyond our consciousness to override and control pain.

Endogenous Opioid Peptides

Most therapists will be aware that some of their clients/patients have what is termed a high pain threshold. When working with these people, we need to understand that they may have higher levels of endogenous opioid peptide receptors. Dommerholt et al cite work by Baldry, who suggests that weak responders to a twitch response may have excessive amounts of endogenous opioid peptide antagonists. If this is the case, the therapist needs to be aware that they may have to work more deeply or harder to achieve the same effects as a normal responder.

Apart from inheriting high levels of endogenous opioids, athletes have the ability to increase these levels during training or competition. This increased level of chemicals can have an adverse effect on an athlete's recovery when treating them for injuries. The 'runner's high' refers to a euphoric state resulting from long-distance running. The cerebral, neurochemical correlation of exercise-induced mood changes has not been thoroughly investigated to date (Boecker et al, 2008).

Unfortunately for the injured athlete, Gamma pain does not disappear with exercise but rather, it increasingly gets worse. In my experience, most injuries are a result of some form of instability and the muscle that is screaming the loudest is generally the one that is attempting to stabilise an unstable area. The more the athlete trains, the worse the condition gets because of the increase of endogenous opioids due to the brain's response to exercise. The more endogenous opioids in the system, the less pain one feels. Not feeling the pain creates a sense of over confidence and hence the athlete trains harder causing more instability and problems.

Boecker et al (2008) conclude that, despite such injuries, the addictive aspects of excessive training may be attributed to the release of endogenous opioids.

Activation of muscle spindles

Erik Dalton (2011) talks specifically about working at the physiological level when treating. If our intent is to relax a muscle, then we must be aware of the fact that we do not need to stimulate the muscle and initiate a myotatic stretch reflex.

Conversely, if our intent is to create tonus in a muscle, then we would use a muscle spindle technique that creates a stretch reflex.

All too often we see therapists attempting to release the tonus of a tight muscle whilst the muscle fibres are lengthened or on a stretch. Palpation of a muscle in an eccentrically loaded position will create further stimulation of the affected muscle. Vigorous stimulation of these stretched muscle fibres will create a stretch reflex thereby causing the muscle to contract more. Facilitated muscles can be tight and weak. This is commonly seen in hamstrings where there is an anteversion or anterior pelvic rotation.

Massaging Acute Pain

After hitting one's elbow or head, rubbing the area seems to provide some relief. This activates other sensory nerve fibres that are even 'faster' than A-delta fibres, and these fibres send information about pressure and touch that reach the spinal cord and brain to override some of the pain messages carried by the A-delta and C-fibres (Pain Gate Theory). The action of these other types of nerve fibres helps to explain why treatments such as massage, heat or cold packs, transcutaneous nerve stimulation or even acupuncture are often effective in treating pain.

Once a pain signal reaches the brain, a number of things can happen. Certain parts of the brain stem (which connects the brain to the spinal cord) can inhibit or muffle incoming pain signals by the production of endorphins, which are morphine-like substances that occur naturally in the human body.

Pain messages may also be directed along a variety of pathways in the brain. The brain commonly blocks out sensations that it knows are not dangerous, such as when a therapist uses an elbow or thumb into the gluteal muscles.

The following is a brief example of how the gate control theory of pain may be experienced. Deep elbow palpation to a client's Gluteus maximus initially produces pain that may be quite intense as the skin and surface muscle nociceptors respond to the pressure of the elbow.

Peripheral nerve fibres detect this sensation and transmit a pain signal to the spinal cord and on to the brain. At first it is the fast pain (Alpha delta fibre) signals that get through. The intensity of the pain experience is fairly proportional to the pressure applied and the bony prominence of the elbow. Everyone would agree that this is acute pain and it causes the typical 'jump response', as discussed by Travell (1983) in her work relating to trigger points.

The slower pain signals (C fibres) are not far behind, however, and a dull ache may soon be noticed. This response is typical to the deep penetration of the therapists' elbow, after the initial acute pain of the pressure. The therapist relies on the dull throbbing pain response from the client as the good pain. After a short while, the pain coming from the palpated tissue will begin to decrease through closure of the spinal nerve gates. This is because the brain begins to view the pain signals as non-harmful. The sensation of the palpation may be painful initially but it is not injuring the person in any way. As time goes on, the pain message is given less priority by the brain and the person's awareness of it decreases greatly. The brain knows that the deep elbow palpation is not causing any injury. Therefore, the brain gradually turns the volume down on the pain message to the point of it being barely noticeable after about thirty seconds. The sensation on skin and muscle is still occurring but it is now perceived as a mild discomfort if it is noticed at all. This technique is commonly known as ischaemic pressure.

Ischaemic pressure

The effects of ischaemic pressure can be related to the pain gate theory. Jiman He, et al (2008) conducted a 'sciatic press', pressure tests of two minutes duration for the ischaemic release of piriformis. They tested over 600 subjects across 10 hospitals and universities.

The type of pressure applied in this technique is much the same as would be used in any physiotherapy and sports massage clinic in Australia. The ischaemic force applied to the gluteal region was 11 – 20 kg by each fist.



▲ Trigger point - gluteus medius

Picture obtained from <http://www.back-in-business-physiotherapy.com/what-we-do/dry-needling->

A Visual Analogue Scale (VAS) was used to measure the subjects subjective experience of pain, before and after the sciatic press was used to release piriformis. Some of the patients tested had a mean baseline VAS score of 7.7. The sciatic press method resulted in a 52.2% pain reduction.

According to the Gate Control Theory of Pain, stimulation of afferent fibres can inhibit the transmission of nociceptive information resulting in an analgesic effect. This theory may explain the rapid pain relief observed in some situations like massage, myofascial dry needling and ischaemic trigger point release. Jiman et al suggest that the pain relief could also be due to the possible activation of multiple inhibitory systems like the activation of the endogenous opioid system.

Summary

When performing massage for therapeutic purposes, it is imperative to mobilise tissues as deeply as possible. However, we must never force the issue to go deep.

The pressure applied has to be significant, gradually increasing to the maximum extent, but we must avoid activating the pain analysing system.

Given the fact that pain is a somewhat subjective sensation and cannot be measured like weight or blood pressure, we have to determine appropriate pressure by consulting with our client and reading proprioceptive feedback through our palpating fingers.

When the client's threshold of pain or discomfort is determined, the therapist must appropriately increase or decrease pressure to the determined level. This determined level will vary according to the amount of endogenous opioids in the system (ie whether the client is a weak or normal responder).

Despite the best scientific measuring equipment available to date, therapists will have to be tuned into the feedback from their clients and the proprioceptive feedback through their palpating fingers. Pain is the body's way of responding to an adverse condition; fight or flight and stimulation of afferent fibres can

inhibit the transmission of nociceptive information resulting in an analgesic effect, explained by the Gate Control Theory of Pain.

Recording individual VAS scores is recommended to allow therapists to maintain consistency with their treatment plans.

Using the VAS will allow the therapist to judge the therapeutic window to achieve the best results for the patient/client.

Jeff originally studied massage at Hunter College of Massage in 1990. After many years of post-graduate study, he is one of only two Onsen Therapy instructors in the southern hemisphere. In 1998, he was appointed Director of Sports Massage for the Sydney 2000 Olympic and Paralympic Games. He has a busy practice in Tweed Heads and lectures at Kingscliff TAFE. He recently presented at Sports Medicine Australia for the International Olympic Committee conference for Oceania physiotherapists regarding soft tissue injuries.

AMT NEW MEMBERS

ACT

Elizabeth Dixon, Colin Frost, Bodine Ledden, Elliot Morschel, Elizabeth Ward-Jones, Xi Yun Zhang

NSW

Joy Asfour, Victoria Bitmead, Phitchanan Butsat, Linda Casey, Gong Chen, Lusi Chen, Yunsheng Chen, Weiping Cheng, Noel Chesham, Adam Cohen, Matthew Condello, Ingrid Dix, Oswald Dorion, Karen Evans, Kellie Faulkner, Qinwei Fu, Kumiko Hasegawa, Zhi Wen He, Steve Hockings, Fiona Howard, Teena Hubbard, Safina Hui Lai, Yu Chao Lang, Wei Xun Li, Zi Ming Li, Nan Lin, Zhen Xing Lin, Jin Mei Liu, Vivian Liu, Xiao Hong Liu, Junchi Ma, Natalie Mackinlay, Thomas Marshall, Margaret Masters, Jutaporn McCarthy, Shane Merrell, Li Xu Min, Suttinee Pannalee, Cynthia Payonne, Qiu Yan Peng, Mandy Russell, Luke Shakespeare, Evgeny Sharabarin, Katie Sims, Jin Huan Tang, Yu Teng, Sharon Thomas, Ellene Travassaros, Hieu Tu-Hoa, Katrina Venables, Kym Walls, Da Qian Wang, Mika Watanabe, Hongdan Wei, Zihao Wei, Wei Wu, Hai Yan Xie, Yiqin Xu, Min Sheng Yang, Yue Yang, Min Xian Ye, Mi Lan Yeung, Rui Yu, Ting Yu, Jian Yuan, Connie Qi Li Zhang, Yu Ping Zhang, Yu Hua Zhou, Zhendan Zhu

QLD

Erin Matthews, Joanne Reichelt, Simone White

SA

Mingyuan Hu, Fortunata Raco, Phudisanat Ratanatilaka Na Bhuket, Manop Sae-Tang, Huan Wang, Yi Chen Wei

TAS

Samantha Fist

VIC

Qingwei Feng, Claire Heland, Gang Lu, Ruth Marr, Melanie Sampson, Jinhui Wu, Anthony Xenos, Cui Ping Xue

WA

Karun Bhusal

For all the latest research news,
events and AMT gossip...

follow us on
twitter 

[http://twitter.com/#!/
ramblingamt](http://twitter.com/#!/ramblingamt)

www.amt.org.au

Health Fund Status

HEALTH FUNDS AND SOCIETIES	CRITERIA
CBHS Health Fund Ltd	This fund recognises all AMT practitioner levels.
ACA Health Benefits Fund Cessnock District Health Benefits Fund CUA Health Limited Defence Health GMF Health GMHBA Heath Care Insurance Limited Health Partners HIF WA Latrobe Health Services (Federation Health) Mildura District Hospital Fund Navy Health Fund Onemedifund Peoplecare Health Insurance Phoenix Health Fund Police Health Fund Queensland Country Health Ltd Railway & Transport Health Fund Ltd St. Luke's Health Teachers Federation Health Teachers Union Health Transport Health Westfund	ARHG recognises all AMT practitioner levels. They require you to use their provider number. This number is AW0XXXXM, where the X's are your 4-digit AMT membership number.
Australian Unity GU Health	These funds recognise members with HLT40302/07 and all Senior Level One and Two members.
NIB	This fund will recognise members with HLT50302/07 Diploma of Remedial Massage; HLT50102/07 Diploma of Chinese Remedial Massage; HLT50202/07 Diploma of Shiatsu and Oriental Therapies; Advanced Diploma of Remedial Massage (Myotherapy)
Victorian WorkCover Authority	This fund recognises Senior Level 1 and 2 members.
HCF Manchester Unity	These funds recognise members with HLT50302/ HLT50307 Diploma of Remedial Massage Advanced Diploma of Applied Science (Massage) Diploma of Health Science (Massage Therapy) 21511VIC/21920VIC Advanced Diploma in Remedial Therapy (Myotherapy). Existing HCF providers remain eligible. Manchester Unity will recognise HLT50202/07 Diploma of Shiatsu.
ANZ Health Insurance (HBA) Cardmember Health Insurance Plan (HBA) CSR Health Plan (HBA) HBA (formerly AXA) HealthCover Direct (HBA) MBF Mutual Community (HBA) NRMA Overseas Student Health Cover (HBA) SGIC (MBF Alliances) SGIO (MBF Alliances) St George Protect (HBA) VSP Health Scheme (HBA)	BUPA recognises members with HLT5030207 Diploma of Remedial Massage, HLT50102/07 Diploma of Chinese Medicine Remedial Massage, HLT50202/07 Diploma of Shiatsu and Oriental Therapies, 21920VIC or 21511VIC Advanced Diploma of Remedial Massage (Myotherapy).
Australian Health Management Group Medibank Private	These funds recognise Senior Level One & Two members.
HBF	HBF recognises Senior Level 2 members.
The Doctor's Health Fund	Doctors' Fund recognises members with HLT 50302/07 Diploma of Remedial Massage, Advanced Diploma of Applied Science (Remedial Massage), Advanced Diploma of Soft Tissue Therapies, Advanced Diploma of Remedial Massage (Myotherapy) and Bachelor of Health Science (Musculoskeletal Therapy). All Senior Level One and Two members remain eligible. They require you to use their provider number. This number is AMXXXX, where the Xs are your 4-digit AMT membership number.

AMT has negotiated provider status on behalf of members with the Health Funds listed. All funds require a minimum of \$1 million insurance, first aid and CEUs.

To be eligible to remain on the above Health Fund lists you must:

1. Be financial and have a commitment to ongoing education (ie: an average of 100 CEUs per year)
2. Provide your clients with a formal receipt, either computer generated, or with rubber stamp or address label clearly indicating practitioner's name, AMT member number (eg: AMT 1-1234), practice address (no PO Box numbers) and phone number. Client's name, date of treatment, nature of treatment (ie: Remedial Massage), and particular health fund provider number may be handwritten.
3. Provide AMT Head Office with a practice address (or business address for mobile practitioners; no PO Boxes) - failure to supply these details to us will result in your name being removed from health fund listings.
4. Notify AMT HO of all relevant practice addresses.

Please check the AMT website for further information on specific Health Fund requirements:

www.amt.org.au

Calendar of Events

Courses accredited by AMT attract 5 CEUs per hour. Courses not accredited by AMT attract 1 CEU per hour. Please check dates and venues of workshops (using the contact numbers listed below).

March 2012		CEUs
1-5	Neurostructural Integration Technique Basic. Presented by Ron Phelan. Melbourne. Ph: 03 5255 5229 or 0419 380 443	175
2-4	Onsen Volume 1 Structural Assessment and Correction of the Thoracolumbar, Pelvis and Sacrum. Presented by Jeff Murray. Canberra. Ph: 07 5599 2514	100
2-4	Oncology Massage Module 1. Presented by Tania Shaw. Canberra. Ph: 07 3378 3220 or 0410 486 767	120
2-4	Oncology Massage Module 1. Presented by Tubi Gulley. Adelaide. Ph: 07 3378 3220 or 0410 486 767	120
3-4	Remedial Cupping. Presented by Bruce Bentley. Brisbane. Ph: 03 9576 1787	70
5-9	Somatic CST 1. Presented by Patricia Farnsworth. Adelaide. Ph: 1800 101 105	140
11	Scoliosis. Presented by John Bragg. Katoomba. Ph: 0410 434 092	35
12-15	Oncology Massage Module 3. Presented by Eleanor Oyston. Austin. Ph: Kylie 07 3378 3220 or 0410 486 767	120
15-19	Neurostructural Integration Technique Basic. Presented by Ron Phelan. Perth. Ph: 03 5255 5229 or 0419 380 443	175
17-18	Pregnancy Massage. Presented by Catherine McInerney. Melbourne. Ph: 03 9532 8144	60
17	AMT AGM & Trivia Night. Sydney. Ph: 02 9517 9925	30
18	AMT Sunshine Coast Regional Branch. Nambour. Ph: 0403 647 754	15
18	Sunshine Coast Branch Meeting. Nambour. Ph: 0403 647 754	15
19	Blue Mountains Branch AGM. Wentworth Falls. Ph: 0416 220 045	15
23-25	Infant Massage Training. Presented by IMIS. Sydney. Ph: 1300 558 608	120
23-25	Oncology Massage Module 1. Presented by Lizzie Milligan. Sydney. Ph: 07 3378 3220 or 0410 486 767	120
24-25	Dorn Spinal Therapy. Presented by Barbara Simon. Randwick. Ph: 0407 946 294	95
24-25	Clinical Orthopedic Massage Therapy for the Lower Back & Pelvis. Presented by Joe Muscolino. Melbourne. Contact terrarosa@gmail.com	80
25	Hunter Branch Meeting. Adamstown. Ph: 02 4953 2252	15
26-27	Clinical Orthopedic Massage Therapy for the Neck. Presented by Joe Muscolino. Melbourne. Contact terrarosa@gmail.com	80
26-30	Somatic CST 8. Presented by Patricia Farnsworth. Adelaide. Ph: 1800 101 105	175
27	Illawarra Branch Meeting. Presentation. Corrimal. Ph: 0417 671 007	15
29-30	Clinical Orthopedic Massage Therapy for the Lower Back & Pelvis. Presented by Joe Muscolino. Sydney. Contact terrarosa@gmail.com	80
29-31	Oncology Massage Module 1. Presented by Kate Butler. Melbourne. Ph: 07 3378 3220 or 0410 486 767	120
30	AMT Riverina Branch Meeting. Echuca. Ph: 03 5482 6422	15
30-31	Onsen Volume 1 Structural Assessment and Correction of the Thoracolumbar, Pelvis and Sacrum. Tweed Heads. Presented by Jeff Murray. Ph: 07 5599 2514	100
31	Clinical Orthopedic Massage Therapy for Common Musculoskeletal Condition. Presented by Joe Muscolino. Sydney. Contact terrarosa@gmail.com. Part of a 2 day programme, concludes 1/4/12	80
31	Somatic CST 1. Presented by Patricia Farnsworth. Adelaide. Ph: 1800 101 105. Part of a 5 day programme, completion date 22/04/12	140
April 2012		CEUs
1	Clinical Orthopedic Massage Therapy for Common Musculoskeletal Condition. Presented by Joe Muscolino. Sydney. Contact terrarosa@gmail.com. Part of a 2 day programme, commences 31/3/12	80
1	Somatic CST 1. Presented by Patricia Farnsworth. Adelaide. Contact 1800 101 105. Part of a 5 day programme, completion date 22/04/12	140
1	Arm and Hand Pain. Presented by John Bragg. Katoomba. Ph: 0410 434 092	35
2	Advanced Assessment & Joint Mobilisation of the Spine. Presented by Joe Muscolino. Sydney. Contact terrarosa@gmail.com	40
4	South Sydney Branch Meeting. Hurstville. Ph: 0419 241 258	15
5	ACT Branch Meeting. Weston. Ph: 0408 238 274	15
13-15	Oncology Massage Module 1. Presented by Tania Shaw. Buderim. Ph: 07 3378 3220 or 0410 486 767	120
14-15	Somatic CST 1. Presented by Patricia Farnsworth. Adelaide. Ph: 1800 101 105. Part of a 5 day programme, completion date 22/04/12	140
16-20	Somatic CST 1. Presented by Patricia Farnsworth. Sydney. Ph: 1800 101 105	160
22	Somatic CST 1. Presented by Patricia Farnsworth. Adelaide. Ph: 1800 101 105. Part of a 5 day programme, commencement date 31/03/12	140
24	Illawarra Branch Meeting. Formal Meeting. Corrimal. Ph: 0417 671 007	15
28-29	Pregnancy Massage. Presented by Catherine McInerney. Brisbane. Ph: 03 9532 8144	60
28-29	Neurostructural Integration Technique Introductory. Presented by Michael Howse. Canberra. Ph: 0417 047 412	70
May 2012		CEUs
3-5	Oncology Massage Module 1. Presented by Kate Butler. Melbourne. Ph: 07 3378 3220 or 0410 486 767	120
4-6	Infant Massage Training. Presented by IMIS. Gold Coast. Ph: 1300 558 608	120
6	Sciatica, Piriformis Syndrome and Hip Pain. Presented by John Bragg. Katoomba. Ph: 0410 434 092	35
17-19	Oncology Massage Module 2. Presented by Kate Butler. Melbourne. Ph: 07 3378 3220 or 0410 486 767	120
17-19	Oncology Massage Module 2. Presented by Lizzie Milligan. Sydney. Ph: 07 3378 3220 or 0410 486 767	120
18-20	Infant Massage Training. Presented by IMIS. Perth. Ph: 1300 558 608	120
18-20	Oncology Massage Module 2. Presented by Tania Shaw. Buderim. Ph: 07 3378 3220 or 0410 486 767	120

Please view the Calendar of Events on the AMT website for the complete 2012 listing: www.amt.org.au

- Follow step by step guidelines
- Improve your skills
- Increase client satisfaction
- Increase clientele
- Increase revenue

Work Smarter Not Harder!!

Onsen muscle therapy is for you
 Vol I Structural Assessment & Correction
 Thoraco- Lumbar, Sacrum & Pelvic regions
 Vol II Functional Assessment & Correction
 of the lower body
 Vol III Structural Assessment & Correction
 Cervical & Upper thoracic regions
 Vol IV Functional Assessment & Correction
 of the Upper Body



What are YOU missing in YOUR assessments?



Presenter : JEFF MURRAY
 Director of Sports Massage
 Sydney Olympics 2000

Learn accurate assessment &
 specific treatment protocol!!

Onsen Technique® is
 AMT approved course
 105 CEU per volume

Are YOU treating the cause or the symptom?

CONTACT US TODAY for course dates:
<http://www.beyondmassage.com.au>
 Enquiries (07) 5599 2514
jeff@beyondmassage.com.au
azusa@beyondmassage.com.au

 **beyond
massage**