

Spinal Reflex Analysis and Pain Management

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In our first article (Autumn 2009) we introduced the concept of the spondylogenic reflex syndrome (SRS) and its cascade of neuro-musculoskeletal effects on the human body. Our second article (Summer 2010) utilised actual case samples to illustrate how addressing the spondylogenic reflex can impact case outcomes in a typical massage therapy practice and we strongly emphasised the need for outcome oriented care. In this third article, we discuss and define chronic pain, its primary cause and its costs in human and economic terms while emphasising massage therapy's role in managing acute and chronic pain through mastering Spinal Reflex Therapy.

Imagine the pain

Ouch! We all know the heart-stopping intensity of stubbing a toe on the corner of a piece of furniture, or whacking the funny bone (ulna nerve) on a sharp object. It is a lot of pain, maybe funny - maybe not, but we know exactly why and where the pain comes from because of the direct damage to tissue at a specific location.

Yet most of your clients do not know why or where the pain and symptoms are coming from. Typically the client, therapist and doctor readily believe the source of pain is predominantly where the client is feeling it. There are four *primary pain sources: tissue damage, sclerotomal, myofascial and dermatomal*, and without this understanding it is evident that pain can be extremely difficult to manage.

Imagine if you could systematically identify and profoundly reduce the prevalent motivating factor driving your clients to seek aid from a healthcare provider. Then, imagine there is an approach that is predictable, reproducible and dependable

and you can learn to apply it to every client. Spinal Reflex Therapy (Analysis) Therapy is a protocol that certifies you to understand not only how, but where and why pain occurs in each individual case.

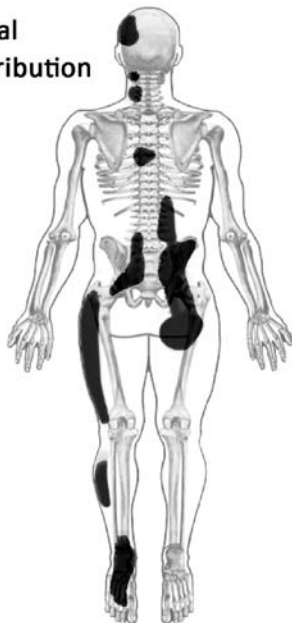
What will this feel like as a professional therapist? What will your clients feel if they can experience a greater reduction in a wide array of pain and dysfunction, knowing that you can make a significant difference in their lives?

Professional and personal experiences

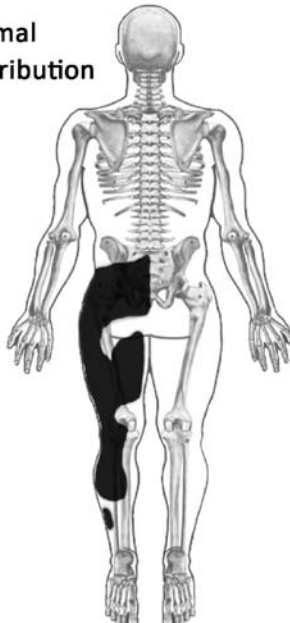
Jennifer Sovine, LMT/USA, a therapist and now SRA instructor, says: "Love the approach, it really sets us apart, it addresses what we all want ... to love our work. To know about this technique and the immense variety of conditions that respond to it is beyond only back pain. It has improved winging scapula, coccygeal pain and all the mysterious ailments and chronic pain that plague car accident victims".

Dr. Aaron Peters USA says: "What was most interesting to me is that the secondary

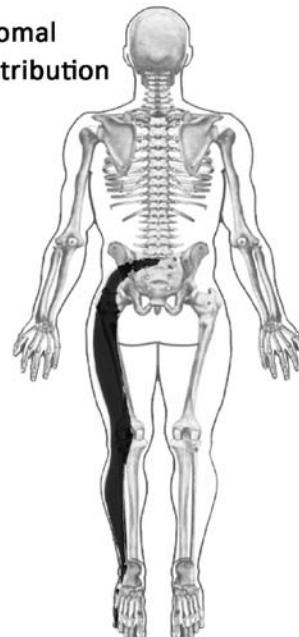
**Myofascial
Pain Distribution
S1L**



**Sclerotomal
Pain Distribution
S1L**



**Dermatomal
Pain Distribution
S1L**



point for L3 [trapezius fibres] is at the end of the spine of the scapula. That is a point on my spine that has given me problems for years. I have had a massive and often very painful trigger point there since I was a kid. I had a baseball pitching injury in Little League that likely never healed correctly and got worse with sports and then ultimately adjusting patients for 11 years. I still play softball but my arm strength has continued to diminish over the years. After having my wife (a therapist) work on each muscle I could feel the tension leaving those muscles. I have a chronically tight T12-L1 region that has often been adjusted by other chiropractors in an attempt to 'get it to move'.

"When I got up off the table after the SRA session and started walking, the TL pain was gone and I could actually stand up without having stiffness or pain. Today when I woke up, the nasty trigger point in my scapular region that I have had since childhood (I am now almost 36) was completely gone and it feels slightly sore like I'd worked out. In fact my whole spine feels that way. It is slightly sore, like a good workout. But the ROM and flexibility in my right shoulder, hips and hamstrings has also substantially improved. I have studied and used dozens of chiropractic techniques over the years and nothing has ever gotten rid of that point, and no other technique has made such a dramatic improvement in my ROM so rapidly. Yesterday at the office I had similar experiences with patients, some of whom I have been seeing for years."

Spinal Reflex Analysis is not magic, even though the client's experience can be powerful and profound. It is an evidence based protocol utilising key elements in the understanding of spinal cord neurology, soft tissue dysfunction and comprehensive pain models and their causative relationship to the entities we call musculoskeletal dysfunction (MSD).

Pain is a powerful motivator and it is the prevalent part of every provider's caseload.

The above professional and personal

experiences clearly illustrate that pain can be managed with effective procedures readily available in education today. Additional case experience illustrates the powerful impact Spinal Reflex Therapy has on the relaxation response, muscle tension, stress, anxiety and on balancing sympathetic/parasympathetic nervous system tone when applied by a certified therapist.

The world of pain

Pain is the greatest motivating factor to drive a client to contact you for care. It is the reason they walk through your office door and invest their trust in your professional skill set with the anticipation that you will make a difference in their health.

It is pain in all its forms, stages and variants that moves people to ask for help. We all respond to pain and we are all quick to forget the degree of pain we suffered after it is over. The nature of pain and memory formation favors forgetfulness and it is a natural response to erase or suppress memories of painful events and processes. It would be a tremendous burden on the human psyche if we remained focused on every painful moment - never to forget.

Many suffer from pain

Generally a condition lasting more than three months is considered chronic. In the recent publication: *The Pain in Europe Survey*, people had been suffering an average of seven years and some of them as long as twenty years. Two-thirds described their pain as moderate and one-third as severe. A staggering 16 per cent said that some days the pain was so bad "they wanted to die."^[2]

This survey also stated that "one in five adults suffered from chronic pain and that one in every three households had at least one member experiencing pain". As early as 2005, a US poll conducted by USA TODAY/ABC News/Stanford University Medical Centre predicted similar statistics illustrating that one in five American adults suffer from chronic pain. This is 19 per cent of the adult

population of the US and European nations.

According to a 2010 American Osteopathic Association (AOA) survey approximately seventy per cent of Americans now say they, or someone they care for, has experienced pain in the previous thirty days and 76 million live with daily chronic pain; affecting more Americans than *cancer, diabetes* and *heart disease* combined.

Roughly fifty per cent do not believe treatment will help and 35 per cent would refuse pain medications for fear of addiction and adverse side effects. Additionally, 28.6 million Americans incur a musculoskeletal injury every year^[6]. These are powerful, painful and moving numbers to observe that demand effective outcome-based care.

The human cost of pain

The toll on a persons' quality of life is immeasurable. Continuous suffering from the pain, often with a constant loss of physical function ranging from minor (doing tasks differently or more slowly) to catastrophic (complete inability to perform a specific task) is evident in many cases.

Chronic pain changes the way information is processed and it causes a loss of mental acuity and the ability to focus. Additional evidence in research points to focal atrophy of specific emotional regions of the brain over time when chronic pain lasts longer than one year. These two factors alone cause about 24 per cent of sufferers to change or lose their jobs, significantly fail responsibilities or continue to perform their duties with a gross reduction in productivity. Social and family interactions and obligations also suffer.

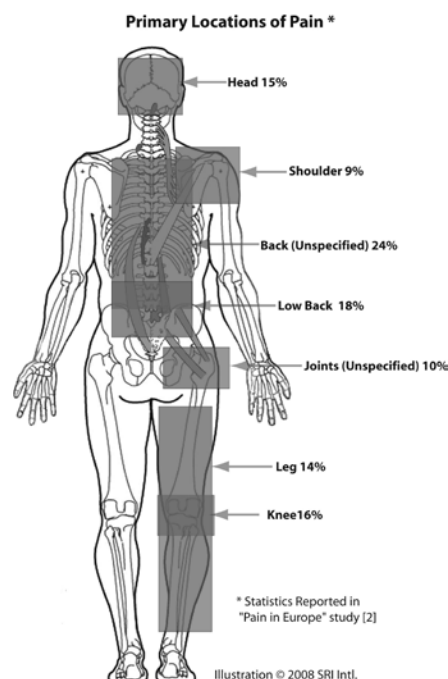
An expanding cascade of dysfunction ensues including stress, poor sleep, missed work or job loss, increased financial burden, depression, low self-image and feelings of hopelessness and devastation.^{[8][9]}

The Fiscal Costs of MSD and Pain

It is a staggering numbers game that is difficult to comprehend! MSD is the most common cause of chronic disability

worldwide^[7], eighty per cent of people in industrialised nations will have back pain in their lifetimes, with half of workers suffering at least one episode per year^[7]. As the direct health care and lost productivity costs for employers continue to skyrocket, so do the number of unresolved or failed care cases, or people reporting inadequate or completely unsuccessful results in both the relief of pain and the resolution of its cause.

Ninety-five percent of non-malignant pain is from musculoskeletal problems such as back, neck, knee, shoulder, and other joint pain; as much as 42 per cent is back related.



Both US and European studies reveal that we are spending more than ever to treat people with these conditions unsuccessfully, while the number of new incidents of acute pain conditions turning chronic is increasing at a steady pace. In the US, the cost for treating back pain alone has risen 65 per cent in the last ten years. Spine problems tallied (89 billion) dollars per year^[1] at just under the cost of treating cancer at 89 billion

and on par with treating heart disease. Spine pain is only half of the total musculoskeletal conditions contributing to pain and dysfunction costs.^{[4][9]}

Musculoskeletal conditions worldwide are the primary reason for doctor visits, disability, lost productivity time, chronic pain and dysfunction and missed work; and it is the leading cause of lost productivity time while on the job. An employer sustains more loss from an employee at work with musculoskeletal pain (presenteeism) than one who is absent (absenteeism). This is due to their impact on fellow employees and team interdependency and it is costing employers and workers billions of dollars worldwide. Presenteeism is at least three times more costly to the employer than absenteeism and all told, musculoskeletal pain is eighty per cent of an employer's productivity losses.^{[3][5]}

We suffer from failed care

The very fact that musculoskeletal conditions are the largest source of chronic pain around the world tells us two things. One, that the original causative conditions are not effectively being treated, and two, that somehow the current "wisdom" for dealing with these conditions assumes that the resultant chronic pain is inevitable and should be considered as a separate "disease" for treatment.

Failed strategies for treating musculoskeletal conditions quickly become attempts at "pain management" through medication and surgery. Even though these are appropriate in some cases, current measures in medication cocktails required to dull the pain to an acceptable level fail in 67 per cent of cases. Clearly, pain is a symptom that may assume enormous ramifications and when you provide effective care you impact much more than pain and dysfunction alone.

Defining your role in pain management

Numbers speak; the cost of treating chronic pain and MSD is sky rocketing, but

the outcomes are falling! Given that the prevalence of chronic pain is clearly stated as being musculoskeletal in origin, a pain management team should include soft tissue therapists and doctors specialising in spinal conditions and implementing effective pain management techniques!

SRA Attachment Point Therapy, also called Spinal Reflex Therapy, consistently appears to directly target the brain's pain analgesic system, or pariaqueductal grey area of the thalamus, and alter the nervous system's neuropharmacology to reduce muscle spasms and muscle tension. An added direct benefit is that these naturally occurring strategic chemicals consistently and predictably induce relaxation and reduce stress, anxiety and chronic pain safely and effectively without risk of addiction. Mastering the art of Spinal Reflex Therapy can allow you, as a professional therapist, to become a part of an effective pain management team involved in facilitating the body to heal.

Chronic pain is defined as: (adjective) (of a disease) having long duration (opposed to *acute*).

Understanding the different types of pain may allow you to talk openly and directly with your clients about their pain. The more you know about pain, the more you can do to offer successful pain management treatment. Other specialists in pain management include oncologists, anaesthesiologists, neurologists, neurosurgeons, other doctors, nurses and or pharmacists. A pain management team may also include psychologists, social workers and yes ... you!

Come to know their pain

Acute pain – short duration, occurring suddenly due to illness, injury or surgery and subsiding with tissue healing.

Chronic pain – persists for long periods of time (usually more than three months) and can be due to failing to treat acute pain promptly at the time of injury or during initial medical and surgical care. It is speculated

that chronic pain has no value or benefit and that it is a disease of the nervous system when pain signals remain active in the nervous system for weeks, months or even years. However, we now observe that spondylogenic reflex syndromes can be involved in mediating a large portion of chronic pain syndromes. Types of chronic pain can be defined as:

Intermittent or Episodic and may occur in waves or patterns.

Persistent and lasting 12 or more hours of every day for longer than three months.

Other pain terms

Breakthrough Pain is defined as intermittent worsening of pain that occurs spontaneously or in relation to a specific activity.

Pain Flares are defined as short-term increases in one's usual level of pain suddenly erupting with or without an aggravating event or activity.

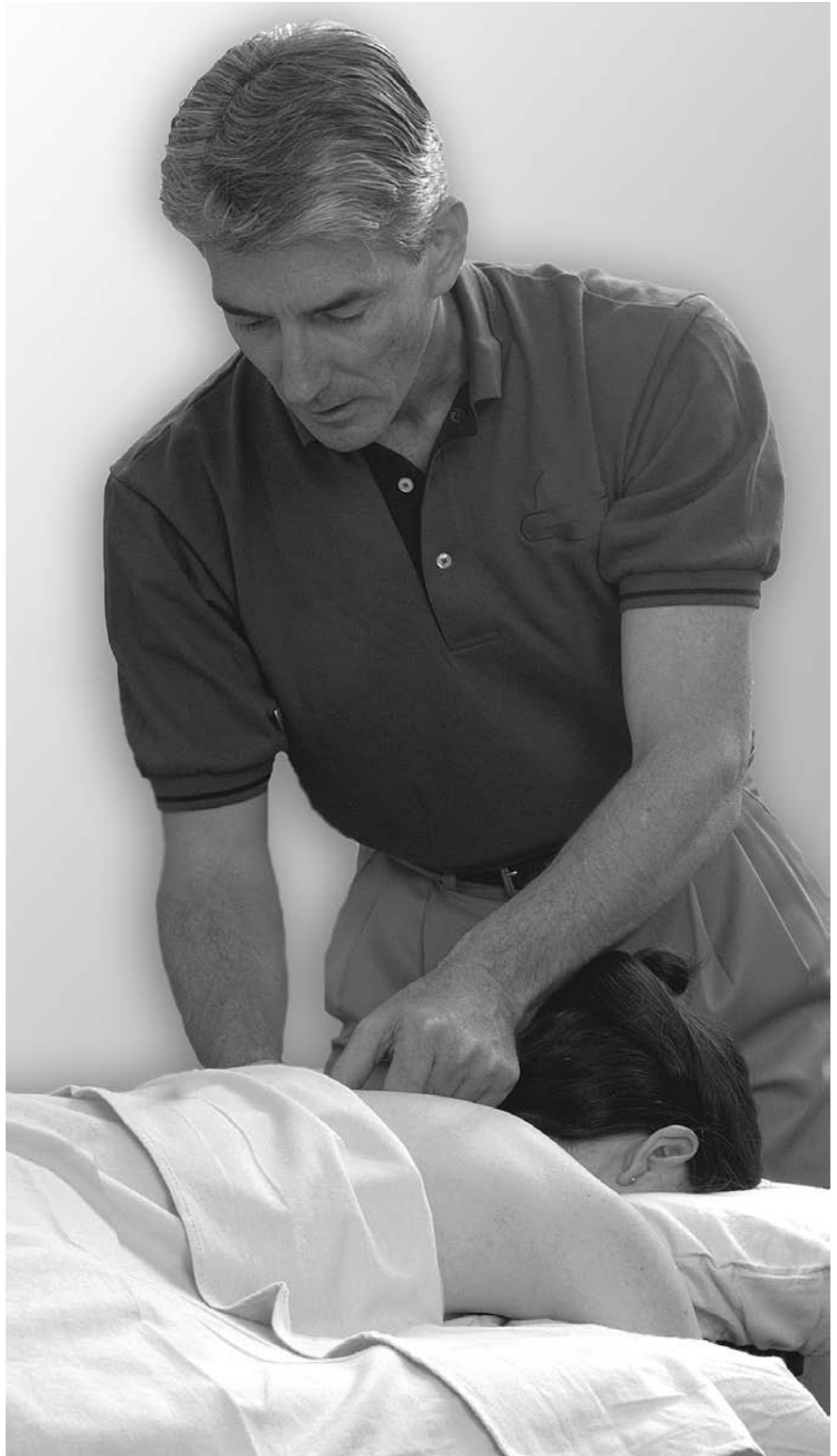
Nociceptive Pain is defined as an injury that stimulates pain receptors for recognition and response to an injury, or the risk of injury and is often accompanied by inflammation.

Types of Nociceptive Pain

Somatic Pain is caused by injury to skin, muscles, bone, joint, and connective tissues and is usually described as dull or aching, and localised in one area. Somatic pain from injury to the skin or the tissues just below it is often sharper.

Visceral Pain originates from ongoing injury to the internal organs or the tissues that support them by stimulation of pain receptors. The organ is often as much as sixty per cent diseased before pain is felt. In hollow organs it may be poorly localised and feels like cramping. In solid organs it may be pressure-like, deep and stabbing.

Neuropathic Pain results from damage to or dysfunction of the peripheral or central nervous system. It is described as sharp, stabbing, burning, tingling or dullness to touch. It often follows a path running from one point to another.



Cancer Pain results from the treatment for cancer or from the cancer itself. Most of the pain comes from a tumor pressing on bones, nerves, or body organs, or by the treatment or the tests done to diagnose cancer.

LOCATE Pain

These seven characteristics of pain will help you further understand its location and intensity:

Location and where it travels to.

Other associated symptoms such as nausea, numbness, or weakness.

Character such as throbbing, sharp, dull or burning.

Aggravating or **Alleviating** factors.

What makes the pain better or worse?

Timing of the pain, how long it lasts, is it constant or intermittent?

Environment of where the pain occurs.

For example, while working or at home.

Pain Scales

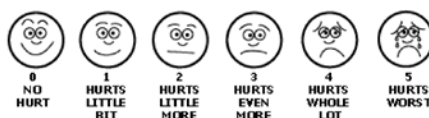
Pain scales set baselines and trends for measuring clients' subjective emotional experience of pain. If the pain rating decreases after providing therapy, then clearly that therapy worked for the client. If there was no change, an increase or the condition relapsed, then it is time to try something else. This is also true in the case of a verbal rating scale by looking for a change in the intensity of "pain words". Greater pain will cause the client to use more words from a high-intensity group.

Verbal rating scales include the McGill Pain Questionnaire. This scale uses words to describe pain making it a "qualitative measurement technique". The client in pain describes the intensity of pain and how they feel.

Observer scales are used with clients who are unable to communicate their pain level effectively. This is an objective scale for measuring pain via facial expression, muscle tone, blood pressure and heart rate. The

FLACC scale, the CRIES scale and the COMFORT scale are "observer scales".

The **Wong-Baker Scale** utilises faces with expressions. This scale follows the same guidelines as the numerical scale whereby zero is represented by a smiley face and in contrast ten is depicted as a distraught and crying face. It is useful when rating pain in children and in adults with mild cognitive impairments.



Multidimensional pain assessment tools quantitate different aspects of pain. Examples are the McGill Pain Questionnaire (MPQ) and the Brief Pain Inventory (BPI). They include location and quality of pain and its effect on mood and function. They are used in pain research and can be adapted for clinical use in assessing pain.

Tackle pain with confidence

The professional and personal stories at the beginning of this article clearly illustrate the rapid potential of Spinal Reflex Therapy as a systematic and evidence based procedure for managing musculoskeletal dysfunction and acute and chronic pain. The numbers are overwhelming and drive home the sheer magnitude of the problem of MSD and pain. As an MSD professional, be a leader and get your *hands and hearts* around this process and show the world we can do a better job at reducing pain and suffering!

For additional information visit www.sramassage.com, www.spinalreflex.org or log onto your Australian Association of Massage Therapists' web site at www.aamt.com.au/

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For additional information visit sramassage.com, spinalreflex.org or log onto your AAMT website at www.aamt.com.au.

