Interview in "El Fisioterapeuta", the monthly newspaper of the Spanish Association of Physiotherapists. March 2010

By Carmen Fuxet, journalist coordinator,

"El Fisioterapeuta"

1. **Tell us about your professional experience, teaching and research career.**

After graduation from BCOM in 1960 I worked for several years as deputy director of therapeutics at UKs largest residential health resort (Champneys) where Neuromuscular technique was developed in the 1930s. After that I worked in private practice while taking various post-graduate courses during the 1970s (acupuncture, cranial osteopathy, clinical nutrition). I wrote my first books in the 1970's (*Acupuncture Treatment of Pain*) and early 1980's (*Soft Tissue Manipulation*, and *Palpatory Literacy*). All of these are still in print in the USA. During the 1980's I taught widely in the USA and Europe at chiropractic, osteopathic and massage schools. In 1989 I became Director of THERA (Therapeutic and Health Research Academy), and in 1993 I was invited to join the University of Westminster, as a senior lecturer and to help design courses for their new School of Integrated Health.

Around that time I was also appointed as a consultant Naturopath/ Osteopath at the Marylebone Health Centre, in London, where I still work when I am in the UK.

During this period I became interested in a number of chronic health conditions, such as fibromyalgia, breathing pattern disorders and chronic pelvic pain. I have written a great deal on these particular subjects, from both a general holistic (nutrition, lifestyle), as well as an osteopathic/physical medicine perspectives. I retired from the University of Westminster in 2005 and was awarded an Honorary Fellowship for services to osteopathy.

Since then I have taught widely in Europe, USA and Australia as well as being a member of the scientific and organising committees for the *International Fascia Research Congress* as well as the *Chronic Low Back and Pelvic Pain Conferences*.

When not travelling and teaching I spend my time between London and Greece (Corfu), with my wife Alkmini. We were married in 1971

2. **Explain the concept of self-regulation of the body?**

Self-regulation can be equated with the process of homeostasis. It is easy to understand the processes involved when considering that cuts and broken bones can mend and heal without external assistance, under normal circumstances of stability and avoidance of further injury during the healing process - or that most infections a e self-limiting. Looked at in a wider context self-regulation can be thought of as the coordination of the systems (endocrine, circulatory, neurological etc) of the body as they work towards achieving optimal function. Osteopathic medicine works on the principle that self-regulation is inherent, but that at times it may require assistance in the form of manual therapy, surgery, exercise, nutritional advice, pharmacology, or counseling, in order to remove obstacles to self-regulation. (Tettambel 2007, Fall et al 2010). Therapeutic methods that either reduce adaptive load or improve functionality (or both), therefore encourage self-regulation to operate more effectively. The opposite to working with self-regulation is to suppress it. For example anti-inflammatory medication suppresses the healing process – and while this can be helpful in reducing symptoms, it is the opposite of promoting self-regulation.

3. **What does muscle energy techniques (MET) consist of as a manual therapy technique?**

Basic isometric MET involves a muscle, or group of muscles, being voluntarily contracted, in a specified direction, for a defined length of time (commonly 5 to 7 seconds), involving submaximal effort, with the contraction being matched by the practitioner/therapist's effort, so that no movement occurs. The methods used may be isometric, isotonic eccentric, or isotonic concentric. The forces involved may be sustained or intermittent (pulsed). The objectives are usually to reduce restriction and pain, but may also include local proprioceptive reeducation features. (Mitchell & Mitchell 1995)

- MET has been shown to improve joint range of motion, including spinal joints (Lenehan et al 2003)
- MET has been shown to improve muscle extensibility more effectively than passive, static stretching – both in the short and long term. (Mehta & Hatton 2006)
- In addition studies offer support for the hypoalgesic effects of MET – for example in relation to spinal pain. (Wilson et al 2003)
- Myofascial trigger point deactivation has been shown to be enhanced by use of MET (Fernández-de-las-Peñas et al 2005)

4. **In its application it seems really important to involve the patient. How is this achieved?**

After the practitioner has correctly positioned the soft tissue or joint being treated, the patient is instructed to use a specific (small) degree of force, in a precise direction, for a prescribed period (anything from

3 seconds to half a minute – depending on the effects wanted). Following the contraction, which is usually isometric, but which may be isotonic (eccentric or concentric), or a rhythmic pulsing effort – the patient (or the practitioner) moves the tissues or joint to a new restriction barrier, or through it, into stretch.

5. **What is the origin of MET, what are its'characteristics and how is it applied?**

Muscle energy techniques (MET) were developed in the 1940's by a group of osteopathic physicians in the USA. The techniques have evolved since then, and are now taught at all osteopathic schools throughout the world as methods for achieving improved function of soft tissues and joints.

MET methods are used to balance muscle tone (i.e., possibly to reduce hypertonic muscle tone, or to strengthen hypotonic muscles, or to encourage improved proprioceptive function), relieve asymmetrical forces acting on spinal and peripheral joints, encouraging restoration of normal joint motion (Selkow et al 2009, Wilson et al 2003). They are also used as part of integrated sequences for trigger point deactivation. MET has been shown to be effective in treating highly sensitive joints, where high velocity manipulation is contraindicated. (Murphy et al 2006)

MET is very precise, very light in terms of the physical effort required (practitioner and patient). It can be used in a wide range of clinical settings, has few contraindications, and results are usually evident rapidly.

6. **What is scientific evidence on which MET is based?**

There are a growing number of studies relating to the mechanisms involved in MET, as well as clinical studies showing effectiveness.

A variety of theories have been expressed to explain the mechanisms of MET – however this is such a large subject that it would be unfair to readers to try to explain this here – it would take too much time and space to cover it properly, and to do it in an abbreviated way would be unfair.

I have provided a number of references from studies by Fernandez-de-las-Penas et al (2005), Ballentyne et al (2003), Degenhardt et al (2007), Fryer & Ruszkowski (2004), Lenehan et al (2003), McPartland et al (2005), Schenck et al (1997), Scott-Dawkins (1997).

There are many more.

7. **Your workshop to be held in Madrid, focuses on clinical applications of MET in thoracic and pelvic dysfunctions. Explain the characteristics of the course.**

The course will cover theory, evidence and practice of MET. There will be focus on assessment, as well as clinical application, in both acute and chronic, joint and soft tissue settings. A large portion of the course will be hands-on, practical, and by the conclusion I would expect participants to feel confident of their ability to use at least some of the methods, immediately.

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