Energy Medicine East and West: A natural history of qi

David Mayor, MA BAc and Marc S Micozzi, MD MSc PhD

CHAPTER ABSTRACTS AND OUTLINES

FOREWORD AND SPECIAL CONTRIBUTION: THE LIVING MATRIX

James L Oschman

James Oschman, well known for his groundbreaking books on Energy Medicine, discusses his theories of the living matrix and the biophysics of vital energy. He also introduces a new hypothesis, on the electrical nature of inflammation and its role in the genesis of chronic illness in the modern world.

EDITORS’ PREFACE

David Mayor and Marc S Micozzi

Here the editors provide an outline of this book and describe how it germinated, as well as their overall approach.

SECTION 1: THE ETHNOMEDICINE OF ENERGY – A GLOBAL VIEW

CHAPTER 1: QI IN ASIAN MEDICINE

Nancy N Chen

Asian medicine is diverse, comprising multiple formations of knowledge and practice interwoven within a broad range of ethnomedical traditions in the region. In Asian medical theory, qi takes on particular meaning not simply as a form that stands alone, but as an entity that flows and brings vital energy to the organs and channels it traverses or inhabits. The cultivation of qi, and significantly its movement, is critical to wellbeing. This chapter offers an overview of the knowledge and practice of qi across these diverse healing modalities and theories of the body.
CHAPTER 2: FLOWS AND BLOCKAGES IN RWANDAN RITUAL AND NOTIONS OF THE BODY

Christopher C Taylor

Introduction
Flow/blockage as core metaphor in Rwandan traditional healing
Brief description of fieldwork in 1980s
Pluralistic medical system in Rwanda, but continued importance of earlier flow/block imagery in traditional medicine
Numerous cases of healers’ patients characterized by flow disorders leading to hypothesis about flow/block
Brief comparison to similar medical-type metaphors elsewhere in the world
Kundalini – India
Qi – China
Humoral medicine – Europe and Middle East
Circulation in biomedicine

Pre- and early colonial period, evidence of flow/block imagery in Rwanda
Imaana
Rwandan notion of supreme deity, but also ‘diffuse fecundating fluid’ of celestial origin
Sacred kingship
King as the conduit of imaana, human focal point of flows
Rituals of kingship, object of the rituals, to regulate flows

More recent evidence of flow/block in Rwanda
Some case histories from traditional healing fieldwork done in the 1980s
Kumanikira amaraso – to ‘suspend blood’ (obstructs menstrual flow, renders woman sterile) – case from northern Rwanda
Umukobwa utajya mu mihango – to stop a woman’s menstrual flow
Techniques of cruelty used during genocide following flow/block idea
Impalement from anus to mouth or from vagina to mouth – totally ‘blocked body,’ immoral body

Closing remarks – what may account for the pervasiveness of this metaphor worldwide.

CHAPTER 3: ELEMENTAL SOULS AND VERNACULAR QI: SOME ATTRIBUTES OF WHAT MOVES US

David Mayor

This chapter explores parallels to qi in a sample of non-Western indigenous societies and in Western culture. The Chinese origins of qi are outlined first, together with its attributes as described in the Western scholarly literature. Next follows a content analysis of these attributes in the other chapters in this book and a discussion of qi in relation to impersonal mana-like force and ‘soul’. The trope of ‘flow’ (the most common attribute of qi in this book) is then sketched through its history in the West, in particular its occurrence in mystical writings, together with the results of a survey of qi-like language in (predominantly Western) fiction. Devaluation of the trope of ‘flow’ in nineteenth and twentieth century mainstream thought has been
complemented not only by its adoption throughout the field of complementary and alternative medicine (CAM) but also by its resurgence in literature. The chapter ends with a discussion of the countercultural context of qi in the West as well as in China.

SECTION 2: QI IN CHINESE MEDICINE

CHAPTER 4: THE ANATOMICAL FOUNDATIONS OF QI

John L Stump

Introduction
Some basic Western science
Some theoretical concepts in physics
Aspects of human energy – jing, qi and shen
Contemporary accounts of qi
    Nervous system – X-signal system – electromagnetic energy – alternative energies
The shapes of qi – the aura and the chakras
The acupuncture meridian system
    The meridians as pathways of qi
    Modern theories of the meridians
The acupuncture points
Conclusion

Chapter 5: Qi in China’s traditional medicine: the example of tuina

Kevin V Ergil and Marc S Micozzi

Perspectives on the history of China’s traditional medicine
Encountering qi
Qi and the essential substances of the body
Tuina (Chinese massage)
Tuina and qi cultivation
    Examples of qigong exercises used in the practice of tuina

CHAPTER 6: QI CULTIVATION IN QIGONG AND TAIJI QUAN

Gideon Enz

Introduction
The origins of qigong
The meaning of qigong
Levels of training
The importance of the lower dantian
Qi and taiji quan
Bodhidharma, gong fu and taiji quan
Qi cultivation in taiji quan
Qi cultivation in qigong
    Purifying – nourishing – harmonizing
The three schools of qigong
- Medical qigong
- Martial qigong
- Spiritual qigong

Comparison of qigong and taiji

CHAPTER 7: QIGONG THEORY AND RESEARCH
Amy L Ai

Introduction
Daoist dialectic view of the world and humans
Ontological differences underlying Western and Eastern medicine
Daoist dialectical epistemology underlying energy-centered qigong
The three basic principles
The Yi Jing: a coding system for universal changes
Health: a holistic balance in ever-changing qi processes

Studies on internal qigong
- Meta-analyses on QG effects
- Hypertension, metabolic syndrome and cardiac function
- Other chronic conditions, aging-related functions and stress biomarkers
- Mental health and addiction

Studies on external qigong
Conclusion

SECTION 3: THEORY AND EXPERIMENT IN QI RESEARCH

CHAPTER 8: THE LANGUAGE OF QI, QUANTUM PHYSICS AND THE SUPERIMPLICATE BODY
F David Peat

This chapter explores the relationship between the languages we speak and our view of reality. Our European languages, of subject, verb, object, strongly support a Newtonian world view of well-defined objects interacting via forces and fields and therefore make it difficult for us to discuss a subtle notion such as qi. In the development of quantum theory, the physicist Bohr also encountered the difficulty of discussing ‘quantum reality’ using such languages. It was Bohm who suggested that maybe a verb-based language, as in the Algonquian family, may be more appropriate to discuss a world of flux and change. While quantum theory had entered a new world it still retained the old concept of force, which is somewhat mechanistic. In turn Bohm proposed the existence of a ‘quantum potential’, which could be compared to an activity of information. He suggested the electron could be thought of as ‘proto-mind’ since it has the capacity to ‘read’ this information. This chapter speculates that such an activity of information may also take place within the physical body. It explores Bohm’s notions of explicate, implicate and superimplicate orders and asks if, when applied to the body, such concepts could lead to a marriage with the ancient Chinese notion of qi.
CHAPTER 9: QI AND THE FREQUENCIES OF BIOELECTRICITY

Cyril W Smith

This chapter compares the concept of qi as a ‘life force’ or ‘energy’ that flows in meridians with the writer’s work on coherent frequencies in living systems. It attempts to provide qi with a basis in physics, investigating whether qi activity can be related to the endogenous frequencies of the acupuncture meridians and chakras and whether changes associated with the healing activity of a qi expert and the manipulation of body qi generate measurable frequency effects of any significance.

Chinese medicine includes many ways of manipulating qi that may be viewed in terms of a pair of complementary opposites (yin and yang) involved in life processes and which if unbalanced lead to disease conditions. If the target organ of an acupuncture meridian is stressed or an acupuncture point is stimulated, the meridian frequency appears in the whole body field. A frequency may be stimulatory or depressive in its biological effects. Frequencies from electrical oscillators or body fields can be imprinted into water. Measurements of such frequencies imprinted into water by a qi expert following recognized procedures are presented and discussed.

CHAPTER 10: SYSTEMS THEORY: TRACKING AND MAPPING HEALING WITH QI

Christopher Low

In this chapter I aim to think about qi in a way which enables us to bridge the gaps between the measurable truths of modern biomedical science, the embodied experience of ‘energy’, and metaphysical description.

This theme is developed by first defining and considering the differences between ‘internal’ and ‘external’ qi. Internal qi relates to different aspects of qi within the human body, such as the meridian system and the san bao (the ‘three treasures’) of jing, zhen qi and shen. In contrast, external qi refers to the external qi field evoked by the practitioner, which purports to have healing effects on the recipient.

Next I consider the part that the practitioner’s intention plays in healing with qi. There are three kinds of intention or daoyin described in the Chinese therapeutic tradition. These are known as mental, breathing and postural daoyin, reflecting the ways intention can be mobilized and implemented. These in turn generate, augment and issue the qi.

Following an outline of qi and setting the groundwork for understanding, I then consider modern research perspectives arising from chaos theory and the new science of complexity, particularly in relation to the structural and functional organization of the body. This appraisal will also include new research findings about regulatory responses for health restoration and maintenance. Leading on from this and relating to daoyin healing, the complexity paradigm also offers new analytical approaches for looking at subtle impacts of healing processes in the treatment room.
Then I explore the chaos methodology in relation to *qi*, based on original research. A randomized, baseline and placebo-controlled study is described whose aim was to observe subtle impacts attributable to *daoyin* healing on heart beat regulation derived from ECG data. The results of this are presented and show the subtle physiological impacts of *daoyin* healing on heart rate variation. These results provide new information on the effects of healing on the vital regulatory processes of the body. The innovative approach described appears to offer fresh insights into the interaction between practitioner and recipient during a healing session, on both biological and physiological levels.

I conclude that *qi* as an energy field does exist, has therapeutic agency, and has tangible and measurable aspects in addition to its metaphysical associations. Regarding *qi* as therapeutic agency runs parallel to other contemporary research findings, for example data in the area of affective neuroscience. Further research possibilities involving holistic evaluation of the processes engaged with and evoked during healing with *qi* are discussed. These offer exciting possibilities for the future.

**CHAPTER 11: THE PHYSIOLOGY OF QI**

Hakima Amri and Mones S Abu-Asab

Neo-Confucian Chinese philosophers attempted to explain humans’ relation to the universe, and their connections to it, through concepts and principles. Like the thinkers of Greek and Islamic cultures, they managed, through observation and reasoning, to put forth an advanced conceptual framework of organic evolution that explained human composition and energy transformations, as well as health and pathogenesis. Interpretation of the traditional Chinese medicine (TCM) and other traditional medical systems within the context of modern science, although challenging, is needed if we desire their integration with the Western medical system. As our analysis shows, in a biological context where *qi* and *li* are necessary to life, we have arrived at the understanding that TCM’s concept of *qi* is basically homologous to the element oxygen; and that the principle *li* fits within tissue differentiation and its physiological respiration, including mitochondrial function in Kreb cycle and oxidative phosphorylation. Therefore, we propose that the *yin* and *yang* of respiration is an interplay between the *qi* (*air/oxygen*) as the *yang*, and glucose supply from starch and sugary foods as the *yin*; while the respiration apparatus of the cell is the *li*. Consequently, therapies of all types and forms have to preserve and enhance cellular respiration since it is the basis of a healthy body.

**Introduction: The understandings of qi**

A brief history of *qi*

*Qi* in health and disease

Modern understanding of Traditional Medical Systems

*Qi* and *li*: the concept and the principle

Health at the cellular level: the *yin* and *yang* of energy production

A modern synthesis of *qi* and *li*
SECTION 4: QI AND ENERGY MODALITIES IN CONTEMPORARY PRACTICE

CHAPTER 12: ENERGY AND MEDICINE

John A Ives and Wayne B Jonas

Energy medicine and bioenergy
Standards and quality in energy medicine research
The example of healing at a distance
Therapeutic Touch, Healing Touch and energy therapies
Light, healing and biophotons
The quantum enigma
Homeopathy as energy medicine: a possible role for quantum entanglement
Some conclusions on mechanism
  The biofield hypothesis
  The placebo effect
  Quantum mechanisms

CHAPTER 13: WHAT DOES IT MEAN TO PRACTICE AN ENERGY MEDICINE?

Claire M Cassidy

An essential characteristic of qi is that it flows ... it moves ... it responds to, even forms, its own environment. That qi flows creates demands that guide Oriental medicine practice, in North America and Europe, in ways that make it distinctly different from biomedicine. In Part 1 of this chapter I support this assertion by asking readers to listen in on acupuncture practitioners as they explain their Medicine. In Part 2, I offer a social science grounding for my argument.

13.1: Experiencing qi
  What is qi? Theories of practice
  Sensing qi
  Sensing the needle and the acupoint
  Clinical care
    Establishing a relationship
    Diagnosing the patient, delivering treatment
    Feedback loops and assessing treatment effectiveness
    Brief case studies
  Conclusion to Part 1

13.2: Thinking about qi and acupuncture
  How representative are the quoted practitioners?
  A metaparadigmatic context for AOM as an 'energy medicine'
  Applying the energy model to clinical research
  Conclusion to Part 2
A lot of the time people feel wrong-footed by talk of energy – especially when confronted by foreign terms such as \( qi \). They assign such talk to intangible or fanciful realms where you have to believe in some exotic model, perform daily ritual practices or subscribe to some cultish or religious philosophy.

During my training in traditional acupuncture it was the quality and presence of most of my teachers that convinced me of a reality behind and beyond the words and information being presented – together with the fact that it was based on their experience. Subsequently I met another therapeutic modality – Zero Balancing – whose founder/instructor Fritz Smith MD had the gift of making things simple, tangible and usable.

In particular he turned the idea of energy into something we all understood, recognized and felt – immediately – and without in any way being asked to believe in anything other than our experience through touch and sensation. I never forgot the impact of those classes on me, or the expressions of discovery and surprise as my colleagues and subsequently my own students went through a similar process.

This bridging of worlds through a neatly defined vocabulary of energy and structure (form and function – mass and movement – tissue and tension – wind and sail), became for many of us an instinctive window on the phenomenology of life: Whether in our perception of it, or our engagement and interface with it – or our self-awareness in the moment by moment experience of it. This fundamentally changed the practice and performance of all my therapies (acupuncture/massage/Zero Balancing), and later my instructing of them; and by no means least my artistic practice that developed subsequently. My therapeutic trainings equipped me for life in a way that neither my culture nor schooling had achieved.

In this section of the book I present examples from my training/teaching experience with Zero Balancing, or just from life, that are all ordinary or common sense experiences, that any reader can resonate with or verify through experiment, and that do not need an expert or an ‘ology’ to authorize them or put a stamp on their authenticity. Whether talking of heat, gravity, vibration or simply the energy of held tension – I hope that I have conveyed something meaningful about energy without creating a muddle.

In addition I reference the experience of communication and transmission of information in teaching energy medicine; the impasse that research into energy medicine so often ends up in; and a personal anecdote regarding Edzard Ernst whom I interviewed in July 2008 when complaining that he had misrepresented the acupuncture profession – and much else besides – in his recent book, coauthored with Simon Singh, *Trick or Treatment*. 
CHAPTER 15: EIGHT MODALITIES FOR WORKING WITH QI:
CHAKRA ACUPUNCTURE, WITH QIGONG, MEDITATION AND
THE FIVE SOURCES OF ENERGY

Gabriel Stux

This chapter draws on more than 30 years of experience in acupuncture and Chinese medicine and 20 years of experience in working with different modalities of energy medicine. New methods of energy medicine are described that have been developed and put into practice in a large acupuncture clinic.

Different ways of using qigong and meditation are essential in these eight modalities. Special attention is given to conscious breathing with regard to different parts of the body and the chakras, and to using the hands to help bring increased awareness to these spaces. This facilitates the connection between the organs by drawing on their five sources of energy and circulating it in the nourishing mother–child cycle of the Five Elements.

The main idea of this work is to bring soul and body together and connect the soul with the heart space by opening the crown chakra. Additionally, awareness is directed to the flow of energy, focusing on the light-level of the life force. When the crown chakra has been opened, light and energy can flow from the soul (the eighth chakra) into the heart space and through the whole body. The spiritual application of the different modalities is emphasized by using awareness to a greater extent.

The eight modalities of this approach are described.

CHAPTER 16: KI IN SHIATSU

Patrizia Stefanini

Shiatsu is a discipline developed in Japan and connected with traditional Chinese Medicine, martial arts and meditation. It is both a massage technique (Namikoshi style) and a do, a way of personal development (Masunaga style), both for giver (practitioner) and for receiver (client).

Ki (qi) has a central role in shiatsu because in shiatsu pressure from different parts of the giver’s body is applied along channels that are said to be the preferential pathways for ki flow in the human body.

These channels or meridians are also a means for sensing the expression of vital functions on different levels (physical, emotional, mental and spiritual). In these places of interaction and exchange, the shiatsu practitioner can support and enhance the life quality of the client.

In a new interpretation, inspired by recent developments in biophysics, meridians can be seen as dynamic nonpermanent phenomena: chains of coherent domains of water (water molecules make up the great majority of the total number of molecules in the human organism).

Furthermore, the human being can be considered as a macroquantum system, a system which has a dynamic nature (all its components fluctuate), and also a well-structured arrangement (all its components oscillate in a
correlated way). Fluctuation plus harmony equal coherence. Thanks to some peculiar properties of these chains, strongly linked with the special nature of biological water, energy can travel through them and is available for the body’s vital activities. A human being is in a healthy condition when this happens consistently.

A shiatsu practitioner who has learnt to resonate with the receiver’s energy field can create conditions where the coherence of his or her own system is enhanced. Thus shiatsu may improve the energetic efficiency and health of the practitioner, as well as the receiver.

CHAPTER 17: BIOELECTRICITY AND QI: A MICROCURRENT APPROACH

Darren Starwynn

This chapter examines what microcurrents are, reviews relevant research into microcurrents and subtle energy fields, and explains the basis for the development of effective therapeutic treatment methods. It concludes with descriptions of clinical microcurrent and color light techniques used or developed by the author for treatment of pain, injury and internal medicine.

A description of the content of each section of this article follows.

Introduction: what microcurrents are; the electrical nature of the body.

Physiology and subtle energy fields: this section offers summaries and excerpts of writings from some of the most notable scientists who have examined how subtle energy affects the body.

Polarity and potentials of the human body: examines the work of Nordenström and Motoyama, and their understanding of how the body regulates electrical potentials in the body to promote physiologic balance.

Crystals, semiconduction and piezoelectricity: further understandings of how the body processes and generates internal bioelectricity. This section introduces the concept of the Living Matrix that interconnects and communicates between all parts of the body.

Applications for therapy: introduces the valuable applications of microcurrent and light therapies for treatment of pain and disease.

Development of effective treatment techniques: this section explains why so many commonly used applications of electrical therapies provide mediocre results, and the principles of energy that must be understood to develop much more effective methods.

Microcurrent therapy and qi: some of the ways microcurrent therapies affect qi, and diagnostic markers recognized by Chinese medicine.

Microcurrent and light treatment techniques: in this section the author gives specific descriptions of the therapeutic treatment methods he has found to be most effective. These are applied through probe and pad electrode applications, often in conjunction with therapeutic colors of light. He also explains the Chinese concept of Root and Branch, and provides an overview of the four-step method originated by Manaka that combines Root and Branch applications in single treatment sessions. The section concludes with a case study from the author’s practice.

Conclusions and future directions: summarizes the chapter contents.
CHAPTER 18: ENERGY PSYCHOLOGY: WORKING WITH MIND–BODY SYNERGY

Phil Mollon

Energy psychology: the synergy of mind–body informational fields for rapid and deep resolution of dysfunctional patterns.

Through much of its history, practitioners of psychotherapy have operated with an implicit illusion that it is possible to address the mind as if it were disembodied. Most psychotherapists do not engage with the body, even though emotions are in part bodily events. The correction for this Cartesian error came from outside the professions of psychology and psychotherapy. In 1964, a Detroit chiropractor called George Goodheart became perplexed by certain oddities in a patient’s muscles around her shoulder blade. This led him to begin an exploration of muscles and their links with states of health and sickness. Along the way, he noted that subtle changes in muscle tone also correlate with emotional states. Combining his observations also with emerging knowledge of traditional Chinese medicine, particularly the energy meridians of acupuncture, Goodheart founded the study of Applied Kinesiology. Psychiatrist John Diamond extended this to include Behavioral Kinesiology and explored the link between meridians and emotions. Building on these foundations, clinical psychologist Roger Callahan, in 1979, discovered that states of anxiety and other forms of distress have a precise energetic coding in the body’s meridians. By accessing this code, and tapping it back as information to the body, the underlying perturbation is released, as if it were a combination lock that is suddenly freed. The implications of this observation, along with related phenomena, are profound. By working with the body’s energy field as well as the psyche, dysfunctional emotional patterns can be resolved rapidly, deeply and gently. Although complex psychological problems still require complex work, the synergy of mind and the body’s energy field enables change that is unimaginable using purely talk-based methods. The effects are so powerful and rapid that reports of these are generally disbelieved. Many derivatives of Callahan’s Thought Field Therapy have developed since his pioneering work – and in 1998 the Association for Comprehensive Energy Psychology was formed. Phil Mollon’s own contribution is to combine the perspective of energy psychology and psychoanalysis, forming Psychoanalytic Energy Psychotherapy.

CHAPTER 19: CRANIOSACRAL BIODYNAMICS

Franklyn Sills

In this chapter, I describe a particular paradigm of life energy and healing work called craniosacral biodynamics, or biodynamic craniosacral therapy. In this approach, the practitioner’s principal orientation is to the forces at work within and around the human system. Although this is an age-old concept, the origin and particulars of this orientation have their roots in the work of an Osteopath, William Garner Sutherland (1873–1954). Over the course of his career, Sutherland shifted from a predominantly biomechanical orientation to one that appreciates the interplay of the primary forces at work in the human system. These creative forces underlie and precede genetics and are
an expression of the most fundamental ordering matrix of life itself. This is a viewpoint that acknowledges that life is a mystery, that all forces and forms originate in an infinite present, that healing is a function of these forces at work within and around the human system, and that healing can therefore occur only in the present moment.

Clinical work in craniosacral biodynamics is largely perceptual in nature. The heart of clinical practice is one’s own state of presence, the clarity and safety of the relational field one generates, the ability to orient to and perceive the underlying forces and processes organizing the human system, and the ability to be in right relationship to all of this. This work entails an intimacy of contact and communication, which demands both stillness and humility on the part of the practitioner. The awareness of one’s own interior world is critical in the creation of a safe and efficient healing relationship. In this process, we inevitably meet our own human condition and our own suffering. This is a huge undertaking. It means truly inquiring into and taking responsibility for the nature of our own suffering and ego processes. From this ground of awareness, it is possible to form clear and healing relationships with others. One truly learns what it means to deeply meet another person in their joy and suffering. Indeed, we learn within the clinical context that we can deeply explore what it means to be a sentient human being.

SECTION 5: CLINICAL APPLICATIONS OF QI AND ENERGY-BASED MODALITIES

Chapter 20: Qi in children

May Loo

The basic physiology of children – yin and yang in the young
  Pure yang
  Young yang and young yin
  Clear visceral qi

Three pathophysiological characteristics of childhood illness
  Easy onset
  Rapid transformation
  Rapid recovery

Organ physiology and pathophysiology in children
  Lung, Spleen, Stomach, Liver

The Five Element developmental theory of childhood
  Case example

CHAPTER 21: QIGONG, TAIJI QUAN (TAI CHI) AND HIV: THE PSYCHONEUROIMMUNOLOGY CONNECTION

Mary Lou Galantino and Laura Muscatello

Introduction

Traditional exercise

Background on movement therapies: qigong and taiji

Taiji and the HIV/AIDS literature
Qigong and the HIV/AIDS literature
Interconnection of the nervous, endocrine, and immune systems: qigong and taiji in HIV/AIDS
The nervous system
The endocrine system
The immune system

Stress
Stress management and the relaxation response

Movement and mood
Depression

Conclusion

CHAPTER 22: ENERGY-BASED THERAPIES IN NEUROLOGY: THE EXAMPLE OF THERAPEUTIC TOUCH

Eric Leskowitz

The multidimensional model of human function
Historic precursors of Therapeutic Touch

The technique of Therapeutic Touch

Scientific studies

Therapeutic Touch in neurology: some examples
Peripheral neuropathy
Multiple sclerosis
Dementia
Headache
Postoperative pain
Burn pain
Other pain conditions

Conclusion

CHAPTER 23: QI IN CHRONIC FATIGUE AND FIBROMYALGIA

23.1 Frequency specific microcurrent and other interventions
Carolyn McMakin

Medical model for chronic fatigue syndrome (CFS): the symptoms include fatigue, swollen tender lymph nodes, depression, sleep disturbance, headaches, sore throats, fever, muscle and joint pain, sinus tachycardia, cardiac wall abnormalities, elevated inflammatory cytokines and neurocognitive complaints. Elevated titers of Epstein–Barr virus (EBV), enterovirus and various bacteria are found in some patients.

Medical model for fibromyalgia (FM): the symptoms include full body pain, fatigue, neuroendocrine and sleep disturbance, central pain sensitization, growth hormone deficiency and elevations in substance P.

Clinical considerations in CFS and FM include managing the complex interactions between the upregulated immune system, the inflamed nervous system, the dysfunctional HPA axis and the impact of emotions on all of the above systems.
Traditional and complementary treatments for CFS and FM include low-dose cortisol, various antivirals and antidepressants, frequency specific microcurrent, mild exercise, various antiseizure medications, and tryptophan and 5-HTP.

QI in CFS and FM is defined as both energy and flow both of which are impaired by the conditions inherent in CFS and FM. Qigong and acupuncture both increase qi and are useful in treatment.

Integration and synthesis of the two treatment models is a challenge for the physician but in the best interest of the patient.

23.2 Health and the human body-field

Peter H Fraser

This subchapter discusses qi from bioenergetic and bioinformational perspectives, integrating the traditional Chinese system with modern physics and biology. Peter Fraser’s theory of the human body-field provides a template by which qi is understood as a dynamic flow in the body and body-field mediated by (a) the influence of magnetic pulses in free space, (b) the energy dynamics of body cavities, and (c) the regulation of information at the genetic level. The latter is dependent in part on bioenergetic structures that in Fraser’s Nutri-Energetics Systems (NES) theory are called Energetic Integrators and Energetic Terrains.

Fraser views all chronic disease, including chronic fatigue syndrome, as a consequence of suppressed immunity that is in part caused by a breakdown of body-field dynamics, and not as a consequence of infection by viral agents or other microorganisms. He holds that stress is also a causative factor that can best be addressed through bioenergetics, including correcting energetic dynamics in the connective tissue matrix of the body and the heart.

CHAPTER 24: THE ELECTRICAL HEART: ENERGY IN CARDIAC HEALTH AND DISEASE

Alan Watkins

Despite its apparent protestations modern scientific medicine is very interested in energy. Although it does not call this energy qi it has nevertheless developed very sophisticated technologies to measure the life force that flows through all of us. Scientific medicine measures the energy in its many forms: electrical, electromagnetic, chemical, sound, pressure, heat and light. From these measurements scientific medicine constructs the most incredible images and maps of virtually every system in the body. These maps and images yield information about how this vital energy flows, its variability and the patterns that are created within one system and between systems. The interaction of different bodily systems occurs in the most exquisite dance of energy patterns. The dance of energy reveals a great deal about our health, our vitality, our performance and what it means to be human. This chapter explores the fundamentals of this information traffic and focuses on the most powerful signal of all – the electrical signals generated by the human heart.
The spark of life
Just one beat
The energy of the heart
Heart rate variability (HRV)
Why HRV is important
- HRV predicts death and illness
- Biological age
- Time management or energy management?
- Crocodiles and wildebeest
The DIY lobotomy
  - Frontal lobe shutdown
  - Binary thinking
Cardiac coherence

Conclusion

SECTION 6: CONCLUSION

CHAPTER 25: THEMES OF QI AND A DOZEN DEFINITIONS: CONTENT ANALYSIS AND DISCUSSION

David Mayor and Marc S Micozzi

This concluding chapter explores themes that thread their way through various chapters in this book, on the basis of a simple method of content analysis (keyword scoring). Areas of relative consensus (such as ‘flow’, ‘energy’ and ‘breath’), the middle ground (‘emotional state’, ‘kundalini’ and the ‘chakras’, ‘awareness’), and areas of relative disagreement (‘measurement’, ‘embodiment’) are discussed, together with some topics that have not been addressed or well covered (side effects, sexuality, shamanism, the work of Wilhelm Reich, the ‘strong responder’, for example). The chapter closes with a recommendation for open-mindedness in future investigations on qi.

REFERENCES

INDEX

GLOSSARY: THE VOCABULARY OF QI

The Glossary at http://www.welwynacupuncture.co.uk/files/energymedicine_glossary.pdf provides a useful resource for further reading.