

Introduction: The Role of Dermatology in Chiropractic Practice

Why a Textbook of Dermatology for Chiropractors?

Chiropractors, like other primary contact physicians, must make an accurate diagnosis of their patients' presenting complaints before rendering care. While the majority of chiropractic patients present with musculoskeletal complaints, chiropractors still observe many skin conditions either primarily related to the presenting complaint, or as secondary findings (some of which are morbid conditions such as malignant melanoma). It has been said that "the eyes do not see what the mind does not know;" therefore, it is necessary for chiropractic students to study diseases and disorders thoroughly before they can reasonably be expected to identify these conditions clinically. Moreover, chiropractors place a considerable importance on clinical diagnosis and careful observation and examination. More than any other organ, the skin is readily available for examination and its importance in the clinical diagnostic process is often overlooked and underestimated. While the retina is said to be the only place where we can actually see arteries in the body, the skin is the only organ that can be observed directly in its entirety. When a skin lesion is observed (and they frequently are in the course of daily chiropractic practice) the challenge is to determine which of three possibilities exist: a primary and purely dermatologic disorder (which of course must be correctly diagnosed to determine whether it is self-limited, or not self-limited but will respond to simple and conservative care, or whether it requires the attention of a dermatologist, either urgently or non-urgently), an internal disease manifesting itself as a skin condition, a variant of normal (or, perhaps a fourth possibility which is a combination of the first three).

Chiropractors and chiropractic students need a specialized textbook in dermatology for many reasons. First, and most obvious, is the fact

that chiropractors probably see more skin than any other health care providers, with the exception of massage therapists. Massage therapists are well aware of what constitutes normal skin and abnormal skin, but they lack training in diagnosis and may not be aware of the significance of a skin lesion, particularly as this may reflect a state of general or systemic illness. Most people do not (and cannot) typically examine the skin on their own posterior surface, especially over the spine. Even spouses or partners do not typically carefully examine this part of the body and, once children reach the teenage years, their parents are very unlikely to see this region of skin or recognize skin lesions on the back. Furthermore, the most common site for melanoma in men is the upper back while in women the most common sites are the lower legs and upper back. Considering the importance of the skin as a reflector of bodily health and disease, the increasing incidence of malignant melanoma, and the ready access and observation of the skin in chiropractic practice, it is actually surprising that this is the first such textbook of its kind.

Next is the fact that the skin, possibly more than any other body part or organ, reflects states of health and disease, particularly generalized and systemic diseases and disorders. Some common examples of these manifestations include conditions such as obstructive bile duct disorders resulting in the yellow tinge of jaundice, or the typical exanthemas of childhood viral afflictions such as measles, or the pallor of anemia, or xanthomas as a reflection of dyslipidemia. Rheumatologic conditions, which frequently present with joint pains bringing patients to chiropractic offices, may include skin lesions. The skin may manifest or reflect metabolic disturbances, nutritional deficiencies, and numerous states of general disease. For example, the excessive dryness or moistness associated with abnormal states of the

thyroid gland or the profuse sweating (diaphoresis) associated with psychogenic disorders, some systemic and infectious diseases.

Moreover, one of the chiropractor's primary responsibilities is to rule out conditions which may not respond to chiropractic care or which may require care from another provider, typically a medical physician. Often, the skin may be the first indication that such a condition exists. Chiropractors must be alert to such possibilities and this includes diligence in the examination of their patients' skin.

Chiropractors play an increasingly important role as "watchdogs" for malignant melanoma. This is partly because the incidence of melanoma is steadily rising (it is said that currently, one in 71 persons in the US will develop melanoma in their lifetime). Also, the most likely candidates for melanoma, baby boomers, are the most frequently seen patients in chiropractic practices. The age demographics of chiropractic practice are somewhat reversed from those of medical practice. In medicine, a large proportion of care is provided to infants and children, who, besides receiving well-baby care and immunizations, are often taken to their doctors by concerned mothers for a host of physiological irregularities. Adults, on the other hand, can be in the habit of avoiding medical care for a variety of reasons such as attempting self-care, the cost of care, and avoidance of painful or uncomfortable examinations. Senior citizens, on the other hand, often represent a captive audience for medical care in nursing homes and related institutions.

This pattern is typically reversed for chiropractic practices. Despite a clinical track record of safety and effectiveness, many mothers continue to be hesitant to take their infants and children to chiropractors, except for simple musculoskeletal conditions. Also, elderly patients, especially those in assisted living settings or nursing homes may lack the ability to visit a chiropractic office or the funds to pay for such a visit. On the other hand, adults, particularly baby boomers, can afford chiropractic care, have often grown up with it, enjoy the hands-on care and the fact that they can often avoid costly medications or even surgery. Social studies of chiropractic care suggest that adult patients trust chiropractors and are very satisfied with what they experience in chiropractic offices. For these reasons, they are likely to seek advice from their chiropractors about conditions that may not even be in the chiropractors' scope of practice.

One of the authors (MW) has observed this frequently in practice and has had the opportunity to direct numerous patients to dermatologists with suspected melanomas, many of which proved to be malignant. The following is an account of one particularly interesting such circumstance, at a time prior to the current laws and regulations governing patient privacy, and when he was practicing in a multidisciplinary clinic with many medical specialists. During a visit with a patient suffering from a lower back condition, a large black, irregular mole was noticed in the area just above the pelvic brim about 5 centimeters lateral to the spine. The examining room door was slightly open and the chiropractor observed a colleague, a dermatologist, passing by the room. Without distracting the patient from the therapy she was receiving, the dermatologist was motioned to enter the room, whereupon he observed the lesion, gave a "thumbs down" sign to the chiropractor and left the room. Having had the benefit of this fifteen-second silent consultation, the chiropractor made a strong suggestion to the patient that she should visit with the dermatologist to have the mole examined. After a biopsy, it was determined that the lesion was indeed malignant and luckily, *in situ*. She recovered from surgical excision and was followed for many years showing no signs of recurrence. Of course, not every chiropractor has a dermatologist roaming the halls of his or her clinic as was the case in this unusual situation, but knowledge and awareness of this condition, coupled with the fact that the majority of chiropractic patients (middle aged and older adults) are at risk for melanoma, and the fact that chiropractors will often see the skin where these lesions are found (in areas where patients don't or can't look) make chiropractors ideal observers and indeed, *watchdogs* for melanoma.

To emphasize the importance of early diagnosis of skin cancer, one chiropractor who is a melanoma-survivor has founded a charitable organization whose goal is "to educate chiropractors on how to identify possible skin cancer in patients, so they may refer those patients to the appropriate specialist" (taken from the organization's website, www.chiros-care.com).

In their primary contact role, chiropractors need considerable familiarity with the most common skin diseases, less familiarity with conditions that are less common, and a general or cursory knowledge of virtually any condition that could

present in their offices. This often poses a difficulty for practicing chiropractors and especially for chiropractic students since most textbooks of dermatology (written for primary care physicians and dermatologists) are very comprehensive, and usually do not separate the common from the uncommon or rare. Chiropractors must know what is infectious and what is not, what *should* be referred to a dermatologist and what *must* be referred to a dermatologist, and how to distinguish a morbid skin lesion from a simple benign lesion. This textbook contains detailed descriptions of the fifty most common skin conditions (Chapter 6) as well as general descriptions of fifty less common conditions, or common but less significant conditions (Chapter 8). The authors believe that this pre-screening of information will be very beneficial to both busy practicing chiropractors and chiropractic students who need quick access to the most vital and relevant information.

Many skin disorders are either self-limited or respond well to simple, natural remedies or easily available over-the-counter medications. These are described in this text and, in fact, fifty different skin treatments or remedies are mentioned in Chapter 7. For those chiropractors interested in educating and advising their patients about natural approaches to health, this chapter is a goldmine of information.

More than at any other time, patients are seeking information about wellness and health promotion. This is especially related to the skin since to the average person, wellness is often mostly manifested in our outward appearance and in our skin in particular. This phenomenon is clearly evidenced in the retail stores where a never-ending variety of cosmetic and skin health products tries to satisfy the growing consumer market for these products. However, even given this growing consumer need for products and information about skin health and wellness, there still seems to be a lack of reliable information on this subject in textbooks of dermatology.

Health care providers of all types are sought by patients for information about the maintenance and care of their skin (and by extension, their youthful appearance and by further extension, their self-image). The chiropractic paradigm of health care, agreed upon by professional consensus and published by the Association of Chiropractic Colleges in 1996, describes health and disease as a continuum (**Figure 1-1**).

On one extreme end of the continuum is a total lack of health and on the other extreme is total health. An individual's specific state of health, or position on this continuum, is a dynamic phenomenon as we are all constantly moving backward and forward on it. The chiropractic

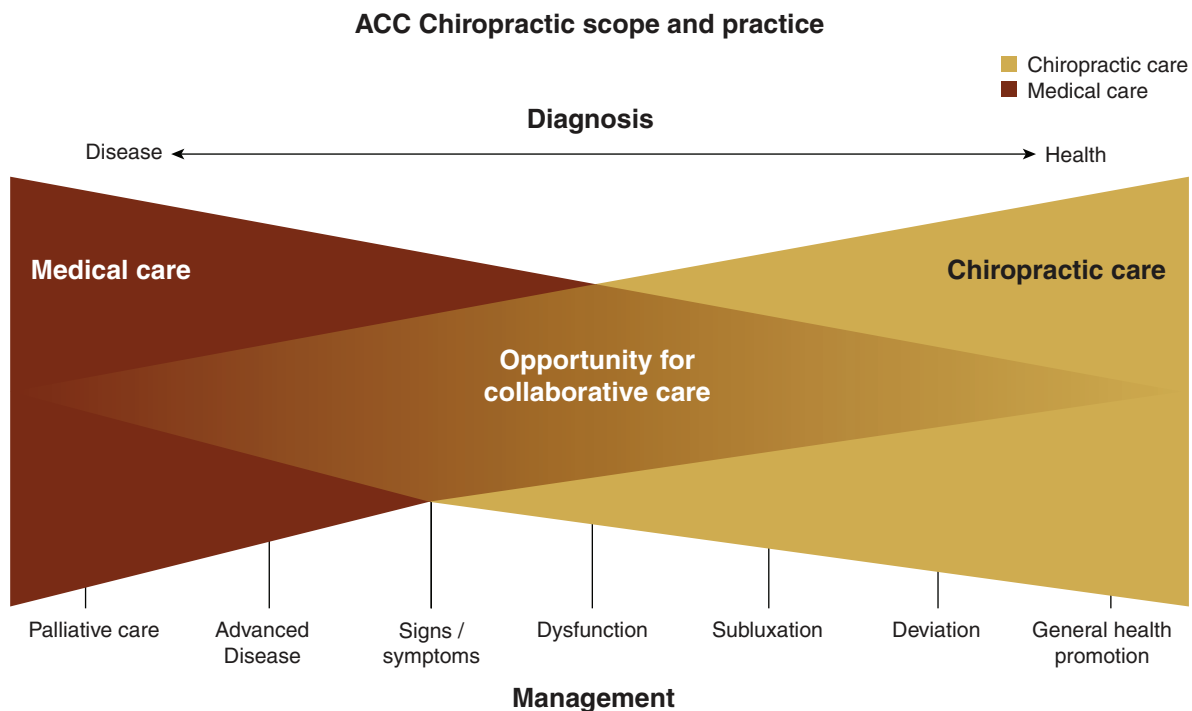


Figure 1-1 Chiropractic Scope and Practice Paradigm, Association of Chiropractic Colleges, 1996.

paradigm model proposes that the primary effort of the medical profession is dedicated to the illness pole of the continuum, metaphorically *pushing patients* away from disease and towards health. Certainly, medicine is equipped to handle all states of disease and illness that may appear at this end of the continuum. Chiropractic, on the other hand, is conceived as functioning mainly at the opposite pole. That is to say, chiropractors want to identify factors associated with health and wellness and *pull patients* to their end of the continuum. It is proposed that this pushing and pulling, when in concert, may function as complementary aspects of the health care system, moving patients away from disease and towards health. While this model was accepted by the profession-at-large in 1996, there has been a paucity of effort to operationalize this in chiropractic education or practice. In fact, most chiropractic research, education and practice still emphasize the role of the profession in dealing with back pain and neck pain rather than in promoting wellness and health. This is unfortunate, because patients, especially wellness-conscious baby-boomers, are desperate for information about the promotion of good health (often symbolized by healthy skin). Chapter 2 is dedicated to the subject of skin wellness and provides chiropractors and chiropractic students with professional level, evidence-based information to counsel patients. Also in this chapter are Patient Education and Information sheets on various aspects of skin health and wellness that can be copied and distributed to patients. It is hoped that other chiropractic textbooks will follow suit and promote evidence-based wellness strategies that chiropractors can utilize as they shift their emphasis from disease to health.

A final, and perhaps most compelling reason for a book on dermatology for chiropractors is related to a basic concept of chiropractic science that proposes a clinically important relationship between body structure and body function. The details, mechanisms and evidence for this conceptual model are beyond the scope of this text, but can be summarized as follows:

- The aberrant function of a portion of the musculoskeletal system (especially related to the spine) may result in aberrant, or inappropriate sensory bombardment of one or more segments of the spinal cord. In chiropractic theory, this phenomenon is due to what has been traditionally called a

“chiropractic subluxation.” In osteopathic theory and practice, this same lesion was formerly known as an “osteopathic lesion” and is currently known as somatic dysfunction.

- Through mechanisms not fully understood, but likely to include segmental facilitation, this sensory bombardment of motoneuron pools result in either spontaneous motor activity or the facilitation of motoneuron pools leading to overt reflex responses following otherwise subliminal sensory stimulation. In fact, it is this motor activity that gives rise to the typical segmental asymmetry and restricted motion that characterizes somatic dysfunction, or the chiropractic subluxation.
- The motor responses associated with this phenomenon are not restricted to only the somatic motor system. At the spinal cord level, segmental facilitation affects both the ventral roots and the lateral horns, thereby affecting sympathetic nerves. A considerable body of evidence exists from early osteopathic research (particularly from the work of Irvin Korr and J.S. Denslow) supporting this idea and demonstrating that the increased segmental sympathetic tone (called segmental sympatheticotonia) is manifested by increased vasomotor tone (resulting in regions of cooler skin, as demonstrated by thermography) and increased sudomotor tone (resulting in regions of hydrated skin, as demonstrated by electrodermography).
- Areas of the body innervated by these sympathetic nerves, and therefore affected by segmental sympatheticotonia are presumed to function abnormally (or inappropriately) since normal autonomic reflex responses are facilitated.
- This very phenomenon was observed by Korr (and previously by Thomas and Korr, and Thomas and Kawahata) by noting the response of sweat gland activity under cool, resting conditions (in other words, no thermoregulatory demand). In these experimental conditions, sweat glands associated segmentally with somatic dysfunction were found to exhibit inappropriate or maladaptive behavior by responding excessively to minor pain stimuli in the absence of thermoregulatory demand. Therefore,

the skin was (and remains) the only organ system to be observed to function abnormally in areas segmentally related to the chiropractic subluxation or somatic dysfunction.

As shown in this brief summary of chiropractic theory, the skin has been experimentally observed to function abnormally in the presence of the chiropractic subluxation, or somatic dysfunction. What does this mean for the relationship between chiropractic subluxations and skin disorders? Certainly such relationships have not been demonstrated with evidence greater than anecdotes and suppositions based on case observations; however, the possible and certainly plausible role of sympatheticotonia as a factor in skin pathophysiology is an intriguing one. Both osteopathic physicians (for example, Patriquin who hypothesized a neural basis for the location of warts) and chiropractors (such as Eldred and Tuchin who described a case of atopic eczema that resolved following segmentally related chiropractic manipulative care) have observed the relationship between chiropractic subluxations, or somatic dysfunction, and segmentally related skin disorders. Chronic somatic dysfunction is also thought to be related to increased pigmentation in segmentally related skin (evidently a trophic disturbance). It remains to be seen if clinical observations and, eventually, clinical research will demonstrate this relationship and support the manipulative care of patients with segmentally related skin disorders.

The above model mechanism for manipulative therapy has been called *neuropathogenesis*. When one considers the frequency with which nervous or neurally-related factors are considered in the etiology of dermatological disease (such as acne, “emotional stress may cause exacerbations”; neurodermatitis, “expression of underlying emotional disorder”; seborrheic dermatitis, “tension and diet are often associated with flare-up”) we can only speculate and surmise the potential role of chiropractic manipulative care in normalizing the function of the spine to diminish or eliminate segmental sympatheticotonia.

References

- Korr IM (ed.). *The Neurobiologic Mechanisms in Manipulative Therapy*. 1977. New York, Plenum Press
- Wagner JD, Gordon MS, Chuang TY, Coleman JJ 3rd. Current therapy of cutaneous melanoma. *Plast Reconstr Surg*. 2001; 105:1774–1799
- Thomas PE, Korr IM. Relationship between sweat gland activity and the electrical resistance of the skin. *J Appl Physiol*. 1957; 10:505–510
- Thomas PE, Kawahata A. Neural factors underlying variations in electrical skin resistance of apparently non-sweating skin. *J Appl Physiol*. 1962; 17:999–1002
- Patriquin DA. Dermal reflections of neural disorders: an hypothesis. *Academy of Applied Osteopathy Yearbook*. 1967: 83–88
- Eldred DC, Tuchin PJ. Treatment of acute atopic eczema by chiropractic care. *ACO* 1999; 8:96–100

