

What does it mean to be a “distinctively osteopathic” family medicine residency?

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OMED 2017
Philadelphia, Pennsylvania
October 7, 2017

What does it mean to be a “distinctively osteopathic” family medicine residency? This may seem to be a silly question, but with the advent of the Single Accreditation System, defining and understanding what “distinctively osteopathic” has become an issue of great import.

But what is the real question we are trying to ask? We have a society that is obsessed with finding answers, particularly the “right” answer. How often do we step back to ask if we are asking the right questions, though? It seems to me that we have become so caught up in answering the questions, we have forgotten that the answer is only as good as the question being asked.

I think, “What does it mean to be a “distinctively osteopathic” family medicine residency?” is the wrong question, and begs the real issues confronting us. The question seems to imply that there is something we might call an “osteopathic education.” And if there is an “osteopathic” education, this would imply some kind of osteopathic concept that we might educate people around.

We are all aware of the tenets of osteopathic medicine (1), published in 2002:

1. the body is a unit; the person is a unit of body, mind, and spirit;
2. the body is capable of self-regulation, self-healing, and health maintenance;
3. structure and function are reciprocally interrelated;
4. rational treatment is based upon an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function.

Most of us can regurgitate these at will. But what do these tenets actually mean to us? How do they inform what we do, how we practice, how we teach? What does it mean to say, “the person is a unit of body, mind and spirit”? Do these tenets have meaning for us that distinguishes us as something different, something that deserves to be distinguished differently, distinctly?

Our current tenets of osteopathic medicine are derived from a 1953 paper, “An interpretation of the osteopathic concept: tentative formulation of a teaching guide for faculty, hospital staff and student body,” written by the Special Committee on Osteopathic Principles and Osteopathic Technic of the Kirksville College of Osteopathy and Surgery, published in the *Journal of Osteopathy*. The term “osteopathic concept” was coined by Carl McConnell, DO. In 1913, he described the fundamental postulates of the osteopathic concept:

- 1. *The human organism is a perfect mechanism. It contains all the attributes necessary for self-growth, self-development and self-repairs. This is fundamental, for without these qualities inherency cannot be a fact and the organism would by necessity be conditioned from without;***

2. **The human organism is a unified whole.** This means every part is reciprocally conditioned. There is a complete and perfect unity of plurality of the parts; every part conditions every other part and the whole. This viewpoint is of the utmost importance for without it the organism would be a mere machine—the conditioning would come from outside;
3. **The human organism contains the attributes of a physical mechanism.** Vital functions are conditioned and amenable to the structural laws of physics. This facet determines the value of the science of osteopathy—its practicalness. Herein is contained the essence of the art of osteopathy.

*The above postulates are inclusive of the scientific phase of osteopathy. Their unification interprets the usefulness or value of the science, the alleviation and cure of the disorders of the organism... **That there are many causative factors in the disarrangement of structural integrity goes without saying; but its corollary, that functional involvement is the result or cause of disordered structure, gives a scientific etiological basis to the osteopathic healing art.** Heredity, environment, hygiene, sanitation, diet, as well as direct traumatism contains influences and forces that directly or indirectly disturb structure and function.*
McConnell, 1913

In 1936, he added:

Because all activities of life, normal and abnormal, constitute a process. It is the significance of the dynamics of the organism that should be grasped. Organized structural systems are essential for manifestations of life. Because the organism is pre-eminently an integrated unit; and transference and transformation of energies are of commanding significance.

Why do I make reference to these historical descriptions? Because I think we have lost the point of what the osteopathic concept was meant to be. When the American School of Osteopathy was founded, its stated purpose was “.....to establish a college of osteopathy, the design of which is to improve our present system of surgery, obstetrics, and the treatment of diseases generally, and place the same on a more rational and scientific basis. Still was trying to define a new paradigm for medicine, one based on a dynamic understanding of life, health, disease, and the human organism:

If we inspect man as a machine, we find a complete building, a machine that courts inspection and criticism. It demands a full exploration of all its parts, with their uses. Then the mind is asked to find the connection between the physical and the spiritual. By Nature you can reason that powers of life are arranged to suit its system of motion. If life is an

individualized personage, as we might express that mysterious something, it must have definite arrangements by which it can be united and act with matter. Then we should acquaint ourselves with the arrangements of those natural connections, the one or many, in all parts of the completed being. Still, 1899

Unfortunately, Still's ability to articulate this new concept was limited by a language based in Newtonian physics, the Industrial revolution and evangelical Christianity. It is only recently that systems theory has developed the language necessary to describe and express these ideas. Where I to rephrase McConnell's postulates using this new language, we might have:

- 1. The human organism is a complex adaptive system.** It is a dynamic network of interdependent systems with emergent properties allowing for growth, development and repair.
- 2. The human organism is a unified whole.** The interactions of its various systems are recurrent and non-linear. The systems themselves are open—boundaries between systems are difficult, if not impossible, to define. There is constant flow of energy within the system to maintain its organization. All interactions are rich, meaning that all elements affect, and are affected by, all others.
- 3. The human organism contains the attributes of a tensegrity system.** It is capable of acting away from equilibrium conditions. This facet, a complex adaptive tensegrity system, is the value of the science of osteopathy. Acting upon the human organism as a tensegrity system allows for the expression of the art of osteopathy.

Redefined thusly, this describes a comprehensive system for understanding health and disease, a paradigmatic shift from our current, disease-based model of medical practice:

No portion or function of the body is disparate; disease is always a process, never static, and environment, aside from organism, is meaningless. As practitioners we must get away from the artificialness of bodily systems, and stand upon the firm ground of 'organism-in-environment.' If there is one lesson beyond any other it is the ingraining of the operating totality of structure and process, of physics and chemism, of sign and symptom. McConnell, 1936

Stop and think! What are the implications of this? We are no longer talking about diseases or population statistics or health metrics. We are talking about how an individual organism functions within its environment, to include its genetic makeup, heredity, epigenetics...its psychology and stressors...its exposures. This is truly talking about something patient centered.

Let us step back for a moment and look at something else: organic farming. I have known many farmers over the years, and enjoy visiting them,

talking to them, learning about what they do. They have given me a great deal to think about.

One of them told me once that “There is no such thing as a weed.” There are only things that will grow and things that will not, dependent on what the soil and the environment will allow. What grows tells him what is happening in the soil, and how he must nourish the soil to bring about the conditions that will favor the growth of the plants he wants, rather than the ones he does not. He can plant what he wants, but in the end, what grows is what the soil will allow. His work then is not so much what he plants, but rather in managing the soil within the confines of the environment it lives in. The soil itself is a thing alive.

This does not mean that everything growing is necessarily what he wants. He still needs to tend the garden. The unwanted plants still need to be removed; the desired plants still need to be trimmed and pruned; the garden still needs to be watered and cared for. But he does not do this by adding chemicals to the soil, spraying herbicide or insecticide, but rather by knowing what to plant and when, by feeding the garden what it needs to support all that grow in it, including the insects in the soil. This does not mean that he can control everything in the garden. It can still get sick and things die. But he nurtures it, allowing it to grow and manifest as it will, guiding it along, not dictating to it.

What if we were to approach medicine similarly? I think this is what Still and the early osteopaths were trying to do and to teach. Yes, they recognized diseases, but what they were really trying to focus on was the individual, the host, and how it exists within its environment. They were approaching disease the way the farmer was approaching “weeds.” The garden, the farm, is a living microenvironment within a larger ecosystem, just as the human organism is its own microenvironment living within a larger system.

How often are we thinking like this? How often are we teaching our students and residents like this? How often are we teaching them how to think about the human organism in its totality. How often are we considering not the individual systems of the body, but the interplay between them? How often do we discuss the affect of a change in one part of the system on the other systems? And then, how often do we discuss this total affectation on the functioning whole?

Are we doing our best in teaching, in practicing? In caring for others...and ourselves?

Still said that he had only shown us the tail of the squirrel, that it was our job to learn about, and expose, the rest of the animal. Have we done this? Or have we parroted what he and the early osteopaths taught, repeating endlessly what he said and did as if it were some gospel we must dogmatically defend or oppose?

I think we can do better. If this is what osteopathic medicine was intended to be, then the question becomes more about how do we achieve this, rather than what does it mean to be “distinctively osteopathic.” How do we employ—and deploy—this osteopathic concept?

First we must start with understanding and teaching the paradigm, the principles upon which the osteopathic concept is based. Given that we are teaching in a residency, this will only be reinforced as it is applied to specific

patients. For most patients, it may not appear much different than the current standard care they are receiving. However, in the very ill with multiple comorbidities, the differences become more pronounced as we take into account the interaction of various body systems. We might make choices differently in regard to treatment: both what to do, what not to do. We will discuss this specifically in an example at the end.

The osteopathic concept does not change anything of what we have learned in the past 100 years about anatomy, physiology, health or disease. It does change how we interpret what we have learned and how we apply what we have learned. The osteopathic concept was not meant as a specialty. It was meant to be applied across the spectrum of medicine. We might even argue that some specialties are beginning to stumble upon this themselves as evidenced in a recent article in the New Yorker Magazine, “The Invasion Question.” In this article Siddhartha Mukherjee questions if we should not be paying more attention to the “soil” cancer grows in, rather than “seed” from which it comes.

Some of you may be thinking that I am minimizing or neglecting the role of osteopathic manual medicine. I am not. OMM is central to the osteopathic concept—but it is not synonymous with it. When we understand the human organism as a complex, adaptive system with recurrent, nonlinear, open systems, the musculoskeletal system must be included in our deliberations. The musculoskeletal system makes up roughly 70% of our body mass; it is the system by which we most interact with the environment; it is the system by which we live and express ourselves to one another. One might argue that all other body systems are little more than life support systems for the musculoskeletal system. Based on what I have argued above, all systems are equally important because no system can exist without the others—but without the musculoskeletal system, there is little need for the others. Thus, its role and function must always be taken into account as we discuss health and disease. In recognizing the importance of the musculoskeletal system, we must recognize the importance of osteopathic manual medicine.

The practice of osteopathic manipulation grows from our understanding of the osteopathic concept. It is an emergent property, not a defining property.

Osteopathic manual medicine, like physical examination, is a learned psychomotor skill, dependent upon the progressive development of palpatory skill, intellectual modeling, and coordinated performance. It is more akin to learning a martial art or a sport than it is the typical didactic experiences we see in most of medical education. If the goal is actual *performance* of this skill, not just learning *about* the skill, then adequate time, dedication and expertise must be committed and reinforced over time. One can read and learn a great deal about a martial art, but such knowledge is of little value in real fight if the art is not actually practiced. The same is true for both OMM and osteopathic principles.

A certain level of skill achievement is necessary before OMM can be practically introduced into the curriculum for patient care. In a martial art, one does not begin sparring until a certain level of skill has been achieved, lest the individual or his/her opponent be injured. The same is true with OMM, the difference being that our intention in medicine is always the betterment of the

patient. As such, a certain, rock-solid level of skill is required before it can be performed on a patient.

Just as we should expect a certain level of skill in physical examination, it is also reasonable to expect a certain level of skill in osteopathic manipulation. This is not to say that every student, resident or physician can, will or should, be an expert in OMM, but that a certain level of skill be decided upon, expected, and required for progression in the curriculum, or for board certification.

In our program, we dedicate two hours each month to hands on training of osteopathic manual medicine. Additionally, we designated one afternoon each week for for a specific OMM clinic. Every resident is required to participate while on their Family Medicine month, working in the clinic. This is a referral based clinic with about one third the patients coming from within the clinic, and two thirds from outside practices. We initially started with hour long appointments so that we could spend adequate time teaching and discussing each patient with each resident. After about 8 months, we moved to thirty minute, follow up appointments. It was our hope that residents would begin treating patients on their own, during their own clinic times. In August 2016, residents performed OMT on 11 patients. In October 2016, OMT was performed on 17 patients. By June 2017, 38 patients received OMT by residents. In July 2017, 55 patients received OMT by residents. Notice that this is the beginning of the academic year with new residents starting. In August 2017, we moved our clinic to a new location, 21 miles from our previous one, into a new community. Despite the time closed and building a new practice, OMT was still performed on 39 patients, by residents, all outside of the OMM clinic. Because of the number of referrals we have been getting, we will be adding another half-day to the OMM clinic in January 2018.

The addition of time dedicated to OMM pays off as an increase in the amount of OMM done throughout the clinic. Granted, most of it is being done for musculoskeletal complaints, but it is being done on people of all ages, many of whom have multiple comorbidities. As residents become more comfortable treating a variety of patients, it is our hope that they will become comfortable treating even most ill patients, including those in the hospital.

Within the OMM clinic, though, there is an emphasis not on doing OMT, but on first making the appropriate diagnosis, understanding what the patient's problem really is, and how might we affect it. What we are not doing is performing OMT on someone's lower back pain. Our emphasis is on understanding where, anatomically, is the problem; what is the underlying pathology; how is that affecting the person physiologically, psychologically and emotionally; how can we impact them using all of the resources available to us; and if we do OMT, what are we trying to achieve in doing so? We cannot treat their pain, but we can affect their function. How best to do so?

This basic paradigm we try to extend to everything we do: from reading ECGs, to managing diabetes. Where is the problem? What is the underlying pathology? How does it affect the physiology, or what, physiologically, has gone wrong? What is the patient's experience, their "illness"? How can we affect them

to allow them to function more physiologically, more completely? What can we affect? What can't we affect?

So what does it mean to be "osteopathically distinctive?" I have argued that it first means that we understand what the osteopathic concept is, and how it is utilized. It is a different paradigm for understanding health and disease. Recognizing, articulating and practicing this osteopathic concept has never been more important. As we enter the Single Accreditation System, if there is value in our profession, we must do more than give lip service to "treating the whole patient," or adding another therapeutic modality to medical practice. Osteopathic medicine is a comprehensive system of medicine, but only if we teach it, learn it, practice it. If not, we will be naught but another historical footnote, adding us to the movement-cure rubbish heap. I would like to think we can do better than that.