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The Conservative Radical

In the early years of the 20th century, chest pain was a subject of considerable interest to many physicians and patients. Angina pectoris was thought to be provoked by exertion, but several physicians reported a lessening of chest pain after several weeks of vigorous exercise. Some researchers and clinicians, including Sir William Osler, suggested that an abnormal *functional*, not structural, lesion could cause angina pectoris: "Or there may be a perverted internal secretion which favours spasm of the arteries, as Harvey at Cambridge has shown to be the case with pituitary extract and the coronary vessels" (2). There were, of course, conflicting views: "A critical analysis of the theories that attribute angina pectoris to coronary spasm . . . demonstrates that these views are open to such serious criticism that they become unacceptable . . . The angina pectoris of Heberden has but one cause, anoxemia of the myocardium" (1). The debate continued for many years, and the nadir came when G.W. Pickering wrote "Naturally enough, the idea has been widely circulated by some writers, who nourish their minds on extravagant and improbable hypothesis, that vascular spasm is extensively concerned in producing anginal pain . . . These phenomena can be interpreted in terms of known pathological or physiological processes, without assuming that arteries behave like whimsical children . . ." (3).

Although Pickering was apparently a master of the well-turned phrase, he was wrong about the science. In 1959, Myron Prinzmetal and colleagues described several patients who experienced chest pain while at rest (some were even awakened by the pain) or during ordinary, nonstrenuous activity (4). This disorder came to be known as Prinzmetal's or variant angina but is today more commonly called coronary artery spasm (CAS). Although the final chapter has not yet been written, it appears that CAS is due to an abnormal response of the smooth muscle of the coronary arteries, resulting in a reduction of myocardial blood flow to a rate below that which is needed to support resting requirements. The agent causing the abnormal contraction of the smooth muscle has not been identified unequivocally, but Osler was likely correct in suggesting some circulating factor as the culprit, possibly a substance released from endothelial cells.

So what does this story have to do with orthopaedic and sports physical therapy or conservative radicalism anyway? I believe it is a fit illustration of the perils of developing extreme tunnel vision or conservative, two-dimensional thought. Pickering and others were so positive that coronary spasm was nonsense that they missed opportunities to provide the best patient care possible. In contrast, Prinzmetal was willing to view the evidence objectively and see that popular dogma was mistaken.

In orthopaedic and sports physical therapy, we have our own practitioners whose train of thought runs on a very narrow gauge track. Anything that is outside the bounds of "convention" cannot be considered physical therapy, nor can it be of much, if any, value. However, do Therapeutic Touch, Reiki, dolphin-assisted therapy, and other "fringe" approaches warrant consideration by physical therapists? Yes, they do, if "physical therapy" is to become more than a collection of wrenches in a toolbox. Although these examples also come under the heading of "techniques," a cavalier rejection of them fosters an attitude that will inhibit the evolution of our profession beyond the tool-maker stage. How many people, including health care professionals, still believe that teaching a patient to use a pair of crutches constitutes "physical

therapy"? In spite of inroads toward direct access, we are, in effect, dependent upon physicians to refer patients to us. When physicians and others stop viewing physical therapy as a grab bag of treatment techniques and physical therapists as technicians, our profession will be in a position to achieve real maturation. Maybe we need a new name.

On the other hand, unbridled radicalism results in the embracing of each new idea that is proposed. The uncritical radical flits from fad to fad as does a child at an Easter egg hunt. Each egg is the best, and none better will ever be found—at least until the next one is spied. I believe *consideration* of new, alternative, and fringe methods, not gullible acceptance, is warranted. Becoming enamored of a particular treatment approach subsequent to attending a course presented by a charismatic guru is fundamentally nothing more than the practice of faith healing. There are many people who fancy themselves romantic iconoclasts in the wilderness of health care, trying to enlighten the skeptics. They say "this works, and I know it works because my patients get better," but, in reality, they are merely solipsists. Assessment and therapeutic approaches must have an existence that is independent of the practitioner. If I am the only one that can observe something, does it really exist? Maybe, and maybe not.

My point is that all approaches to prevention and rehabilitation deserve

to be heard, but not all ideas have equal merit. Just because a theory or approach does not fit with the facts as we know them today does not mean the theory is fraudulent, but it should at least have an appearance of validity. What are some ideas contrary to generally accepted doctrine in physical therapy? Try these statements:

- 1) Essentially no relationship exists between habitual resting posture and musculoskeletal pain.
- 2) Skeletal muscle "spasm" as a source of pain is a myth; involuntary contraction of skeletal muscle is a response to an injury and needs not be treated.
- 3) Electrical stimulation is helpful in recovery from a spontaneous lesion of the seventh cranial nerve.

These assertions may be wrong, but there is insufficient credible evidence to the contrary. Although a majority of physical therapists may disagree with these statements, the disagreement generally comes from a visceral, not thoughtful, response. The unchallenged idea does not warrant an unquestioning defense. As Socrates said about introspection: ". . .the unexamined life is not livable for a human being. . ."

To summarize, I believe that all ideas deserve a voice, a hearing, and require a challenge. The phrase "conservative radical" should have a place in the philosophy of any good clinical

scientist. If the profession of physical therapy is to survive in the 21st century, we must think differently than we did in the 20th century. Albert Einstein said it very clearly: "The world we have created today has problems which cannot be solved by thinking the way we thought when we created them." I believe the emphasis should be on the word "we"; the problems are ours because we created them by being either too conservative (rejecting anything new without sufficient thought) or too radical (accepting anything new without critical thought). It is time for conservative radicalism.

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