

Sports Medicine and Manual Therapy – A Look to the '90s

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(Special to the Forum)

Sports Medicine is a popular Physical Therapy specialty. A time for reflection and revision may have arrived. This refers not to a superficial, or aesthetic change, but to a major remodeling: specifically a shift in focus and intent. Sports Medicine has evolved to encompass many areas of expertise for the physical therapist, but essentially the growth in this field has not responded to the changing times. Many professionals might refute this statement: consider such innovations as *Cybex, Lido, Kin-Cor, Biodex, Nautilus, Eagle, Chattanooga, Rich-mar*, and more.

Ponder the ultra new surgical techniques: non-invasive approaches, new implants, and reconstructive protocols are evidence that Sports Medicine is proceeding on a fast track to the future. Many practitioners would cite modernization of sports equipment: better football helmets, superior footwear for running activities, improvements in materials technology including bicycle frames, tennis rackets, baseball bats, golf clubs, and sneakers. Master experts could compare the athletic achievements of today's athletes to those of 20, 10, and even 5 years ago. Their arguments: due to advances in Sports Medicine, participants enjoy shorter duration rehabilitation, improved modalities to bridge the gap between the limitations of structural and functional rehabilitation and the normal healing process and state-of-the-art external support mechanism that compensate for constraints of time and unsuccessful rehabilitation.

In fact, the practice of Sports Medicine appears to have lost proper focus: the athlete. The physician's role revolves around an effect/cause relationship: injuries are addressed, as they are presented, after the fact. Rest, medication, or exercise is typically prescribed prior to physical therapy. When physical therapy is initiated, rehabilitation consists of various forms of technology also designed to treat the symptoms, or to mask them. We have all succumbed to the onslaught of high technology: consider the geometric increase in equipment distributors! Honesty compels us to state: Sports Medicine is big business.

Recently, the focus of our research and continuing education appears to be substantiation of this high technology equipment. Examination of an abundance of Sports Medicine articles revealed a succession of the same topics/contributions by different authors. Occasionally we found a rehashed topic with a unique twist; but novel, inspiring cataclysmic conclusions are rare. Many presentations concentrate on treatment of symptomatology (pain), or discuss syndromes—almost always lacking proper causal and interpretive data. Our deduction: research and continuing education within our profession appears focused on analysis and treatment of injury and symptom—the focus is not on the athlete.

Undeniably, surgery has developed at record pace during the past decade. With each swift change, once recent state-of-the-art techniques become obsolete. Reconstructive surgeries, once considered unparalleled, are presently being reviewed for long term effectiveness and durability.

Sports Medicine Physical Therapists concerned and invested in the rehabilitative results for their patients may feel affronted by these statements. Allow us to elaborate our concerns. We feel that the most valuable therapeutic contribution for the injured athlete is not a \$30,000 Biodex, with a

Russian Stimulator or a challenger swim tank, or a Lenox Hill Lightweight knee brace, which is perfectly adapted for orthotics and expensive sneakers. This approach might be integrated with an aggressive program of Isotonics, Isokinetics, PNF with functional filming and video taping of proper and improper performance techniques. This might be coupled with electrotherapy modalities, and a complete home exercise program for stretching and strengthening, also to be performed during the off season. What is the flaw in this program? What is best for the athlete? The above describes the treatment of the athlete from the injury outwards. This is acceptable only as adjunct therapy. The athlete needs to be treated from the injury inwards. We view this lack of addressing this patient population from the injury inwards as the major fault in contemporary Sports Medicine.

Our concern therefore: most rehabilitation programs are injury oriented and treatment is performed external to the patient. In fact, we treat (and over-treat) the equipment! The following scenario is possibly familiar to you. A tennis player arrives at your clinic. You diagnose tennis elbow, with a history of acute overuse. Traditional physical therapy offers several popular solutions so this seemingly straightforward problem. Of course, resolution of the problem might depend on which discipline, or therapist, assessed and treats the case. Consider the tennis layers entry into healthcare via a physician; solutions could vary from injections, immobilizations, medication, rest, splinting, or gentle exercise. The physician delivering long-term course might recommend modification of the tennis stroke in the future. If this fails, physical therapy might be initiated. Your conservative therapist protocol could include ultrasound, iontophoresis, high voltage, low voltage, interferential current MENS, TENS, ice, heat, paraffin, active and passive exercises, progressive resistive exercises, friction massage, acupuncture, etc. The focus of therapy: the elbow and forearm. Completion of a comprehensive therapeutic approach would, of course, include examination of the tennis racket. Your suggestions might vary: change the racket string tension, exchange the metal racket for a wood racket, increase or decrease the racket grip size, switch the court surface, modify the backhand to a two handed short, refrain from excessive top spin on the ball.

The objective of this article is not to refute the effectiveness of the above described therapeutic protocol. In fact, we did not refer to all possible traditional treatment approaches. This *modus operandi* will continue to be acceptable within our profession; there is often success in alleviation of signs and symptoms. Symptoms are addressed and rectified; then the equipment is typically treated; if the problem recurs, there is a tendency to fault this equipment.

The above scenario indicates the error in Sports Medicine today—tragic for the athlete. Rather than evaluation with a holistic, comprehensive, total body view, tunnel vision is utilized. The pain, possibly the syndrome, is assessed and treated. Minimal regard is dispensed to total patient care of the internal matrix of an optimally motivated patient. The athlete is rehabilitated for the moment. Carry-over effectiveness is not an issue; the indication of a successful Sports Therapist is in the speed with which the athlete is returned to action. Patients subjected to therapy by early pioneers in Sports Medicine are returning to our offices today. Few remain actively engaged in sports; most have trouble getting out of bed in the morning due to pain, the result of severe musculoskeletal dysfunction. Why? This population should be a reflection of a healthy American! But they followed the adages: No pain no gain; run it off; play through the pain; win one for the Gipper! Fallacies and myths run rampant in this field. Our profession needs to return to the basics with our athletes. Today's athletes receive excellent and adequate attention, but the focus remains on the over-priced medical equipment.

Our hands should be on the athlete, treating from the injury inwards. The authors are recommending a specifically tailored rehabilitation program, which requires a commitment of time. This recommendation includes a systematic evaluation and treatment plan, derived from a static and dynamic view of the athlete, as well as from an assessment of specific structural and functional considerations, which will affect their sport and will provide enduring carry-over effect.

We suggest an *Integrated Manual Therapy* approach which offers the physical therapist fascinating insight and tools to provide holistic, comprehensive, multi-system care. The trauma site is treated, but simultaneously the extensive sequelae that most assuredly occur with every sports injury in every injured athlete are addressed. Integrated Manual Therapy, in our clinics, include structural and functional rehabilitation approaches. The uniqueness is the structural rehabilitation. This includes utilization of concepts and approaches such as Muscle Energy Techniques, Jones Strain/Counterstrain Technique, Cranial and Craniosacral Therapy, Manual Lymph Drainage, Myofascial Mapping with Soft Tissue and Articular Myofascial Release Techniques, Somatomotional Release with Guided Imagery, Visceral Manipulation, Soft Tissue Mobilization, Zero Balancing, Trager and other philosophies. Skilled therapists utilizing these techniques must recognize the importance of timely implementation.

Practicing Integrated Manual Therapy, we have generated a concept: the practice of “Developmental Manual Therapy.” This process guides our progress through the structural neuromusculoskeletal dysfunction of each athlete, as well as our general patient population. Structural rehabilitation is initiated early; materials modification is often unnecessary. Not all these approaches and techniques are needed for all patients; but our success rate is enhanced exponentially as our capabilities to assess and treat all body systems become more comprehensive. Our focus in treatment: restoration of symmetry to the axial and peripheral skeleton; normalization of mobility to the fascial and dural system; establishment of a healthy environment for the mind/body complex. There is no one technique, which can be considered a panacea for sports injuries. Integrating therapies, which address all body systems comprehensively will achieve our goals. If physical therapists are to secure a niche in the field of Sports Medicine, they cannot rely so heavily on machines and external mechanical aides.

As a sample case history, the tennis elbow scenario described above would vary if Integrated Manual Therapy was practiced. The athlete would undergo a complete axial skeleton assessment, static and dynamic, followed by treatment with Muscle Energy Techniques and Strain/Counterstrain techniques. The peripheral skeleton would then be addressed in a similar manner. Concurrently, the initiation of Functional Rehabilitation with techniques such as PNF, Functional Orthopedics, and Feldenkrais would occur. We would then address the fascial system with Myofascial Mapping, followed by Soft Tissue and Articular Myofascial Release Techniques, progressing to Regional Myofascial Unwinding. Possibly residual edema would require Manual Lymph Drainage. With improved structural integrity, Craniosacral Therapy would be initiated. We consistently retrace our steps. Continual reassessment is required; old, forgotten injuries will surface and require treatment. This protocol appears extensive. Essentially the total time is not significantly different than that required to perform basic modalities. Benefits reaped are distinctly and measurably greater and more enduring than those achieved by traditional regimes.

“Rehabilitation for the moment” does not offer us, as a profession, any unique identification or niche in the Sports Medicine spectrum. This is evidenced by the expansion of health clubs, physician practices, chiropractors, aerobic instructors, athletic trainers, and lay people—all utilizing the same equipment! Our forte, to employ as an enure into the 1990s as sports therapists, would be acknowledging and utilizing a grounded Integrated Manual Therapy approach, which applies holistic protocols prior to the use of present day high technology—which is already overused!

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