Do You Just Want to Feel Better or Get Better?

Guest Editorial in ORTHOPEDICS

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In his Presidential Address at the 1999 American Academy of Orthopaedic Surgeons Annual Meeting in Anaheim, Dr. Robert D'Ambrosia exhorted all orthopedic surgeons to seek partnership with their patients. Such a partnership would encourage patient advocacy for appropriate musculoskeletal care, including specialty access. Inherent in this, of course, is the need to offer guidance in nonoperative as well as operative care. Dr. D'Ambrosia thus encouraged us to make significant efforts to educate our patients. That certainly is the ever-present role of the physician. Coincidentally, the Latin word for teacher is "doctor".

This is not a new concern of the orthopedic community. The topic was reviewed in a recent AAOS Bulletin[1] that outlined the recommendations of an AAOS Task Force on the expansion of orthopedic practice. One of the Task Force recommendations was to encourage the American Board of Orthopaedic Surgery to increase its emphasis on nonoperative orthopedic care both in the primary certification examination and the recertification process. These recommendations contrast the apparent lack of interest by orthopedists in nonoperative care. At this year's AAOS meeting, of hundreds of papers and posters presented, not one study concerned physical therapy treatment of musculoskeletal disorders.

LACK OF EVIDENCE

How can these two concepts—seeking patient partnership and encouraging interest in nonoperative care—be blended? The answer is to encourage patients' participation in their own care for chronic musculoskeletal problems. That is the concept proposed in the title of this editorial.

Many things can make an aching joint feel better temporarily, ranging from enjoying a martini in the evening to massage and manipulation. However, there is no evidence that passive modalities change the natural history of a degenerative phenomenon or avoid recurrences. Thus, it would be difficult for those assembling appropriate examination questions to identify evidence based answers for physical therapy. Because the dose of passive care cannot be measured, studies on passive physical treatment lack any basis for comparison and thus preclude comparative clinical studies.

Where is there evidence for efficacy of nonoperative musculoskeletal care? The word evidence implies that the treatment can be measured, patient compliance is definable, and objective starting points and endpoints in treatment can be identified. Physical training embodies all of those specific characteristics. After all, it is the mechanism by which professional athletes return to function after injury. They are guided in their progress by athletic trainers.

THE VALUE OF PHYSICAL TRAINING

There is a strong orthopedic heritage in physical training. Delorme[2] first described "progressive resistance exercises" in 1945. He applied the training principles used in competitive weightlifting to progressive therapeutic exercise for rehabilitation of the injured joint. Active patient participation was required, and progress was measured using specific equipment. He emphasized the physician's active participation in encouraging patient progress and offering reassurance in the efficacy of progressive resistance exercise. These principles remain the same today. Orthopedic surgery, however, has changed greatly.

There actually is a lot of support for the use of physical training. The most clearly defined benefits are related to the knee. It has been documented that injury to the knee rapidly reduces the strength of the quadriceps, especially the vastus medialis. This abnormality, however, can be corrected by appropriate physical training[3].

Why is patient partnership needed if the orthopedist advocates appropriate health care? Are there any reliable principles that can be taught to patients that will allow them to actively participate in health care decision-making that is in their own best interest?

Appropriate physical training means active physician involvement in the supervision of the training program. Measurement of progress is inherent in any physical training program. This measurement offers an appropriate communication bridge based on objective data by which the patient and his or her physician can monitor progress. That is a partnership. A discussion carried out in terms of numbers is more easily understood than terms such as "better" or "stronger."

Well, maybe it's okay for the knee, but what about other joints? Morrison et al,[4] in a study of 616 patients with the diagnosis of shoulder impingement syndrome, reported the results of a preoperatively initiated rational treatment program. Perry et al[5] noted that the relative inactivity of the shoulder rotators allows elevation of the humerus against the acromion, thereby creating impingement. In this case, a rational exercise program to

strengthen the rotators can easily be understood by patients. After such a training program, only 20% of the patients in the Morrison series subsequently required surgery.

GOOD INSIGHT INTO THE HEALING PROCESS

If the orthopedist wants to partner with patients in an active exercise program, he or she must accept that the goal is to make most of them better. Some patients will evade surgical care. It should be noted that most patients in the Morrison series had undergone previous physical therapy with hot packs, massage, and ultrasound. Few had been instructed in the function of specific exercise programs. With appropriate physical training, > 70% who had failed previous standard physical therapy had a successful outcome. Patients who did not comply with the physical training program were identified as questionable candidates for surgical care.

Of all physicians interfacing with patients with recurrent musculoskeletal problems, the orthopedist has had the greatest opportunity to see and feel normal as well as deranged soft-tissue abnormalities both in training and in practice. This experience gives significant insight into the healing process through enhanced, progressive stresses and return of normal muscle balance through physical training. This insight allows the orthopedist to communicate with the patient with reassurance based on knowledge and experience.

Because of orthopedists' basic knowledge of muscle physiology, they understand how the inhibition of muscle function relates to incompetence of associated joints. They also recognize that physical training with associated facilitation of the appropriate musculature can rapidly reverse this. This is true for all areas of the body and has been demonstrated by myoelectric testing. A measurable response to training has even been demonstrated in patients with lower back pain[6].

There is nothing mystical about physical training. Orthopedists can use measurable evidence to enthusiastically reinforce the training process with the patient. However, they must fully understand the benefits of passive care, such as ultrasound, massage, and manipulation.

LACK OF FISCAL SUPPORT

Physical training is not always reimbursed by health-care insurers, especially managed care companies, because it is considered health care, not medical care. Thus, patients may need to be encouraged to continue the physical training at a health club setting with the help of exercise science-based trainer providing feedback to the physician.

One reason for the lack of studies about physical training is that when legislation caused a divorce between orthopedists and physical therapy centers there was no longer a mechanism for the physician to be directly involved nonoperative care of musculoskeletal disease. With lack of medical involvement at these physical therapy facilities, there is minimal fiscal enthusiasm for any interest in nonoperative care. This trend may be reversing with the growing interest in physical training centers.

ACTIVE PATIENT PARTICIPATION

The only way we can return to a true partnership with our patients is to focus on physical training as the alternative surgical care for degenerative problems. Physical training demands active patient participation to be successful. Patients certainly will do this if the mechanisms are clearly defined to them, they are appropriately encouraged and instructed, and their behavior positively re-inforced. They will appreciate their physician as instructor in appropriate care as well as the value of partnership in getting better, not just feeling better.

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