

Effectiveness of Therapies Currently Employed for Persistent Low Back and Leg Pain

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In the Focus article, Drs. Loeser and Sullivan marshal several lines of argument to suggest that disability in the chronic low back pain syndrome is iatrogenic. The concept is intriguing, but not new. Shorter, in his excellent review of psychosomatic illness in the era of modern medicine, developed the thesis that somatization by patients follows a variety of societal and medical fashions.⁹ There is much merit in what Loeser and Sullivan present. However, it is my view that the problem is much more broadly based than the contribution of physicians alone. The medical profession, society in general, and all of our legal and administrative institutions have failed to understand the concept of somatization. I believe this is the key to the problem. The real issue is the diagnosis of psychogenic physical symptoms and their appropriate treatment. Separating organic from psychogenic disease and appropriately determining the causes of both is key to improving the current confused situation.³

The documented history of psychosomatic symptoms begins early in the 18th century. About this time pseudoseizures, generally called hysteric fits, were recognized. Later in the century much unexplained malaise and pain was ascribed to gout. The erroneous physiology of the uterine theorists and the concept that psychiatric symptoms began in the sympathetic ganglia of the abdomen were used to explain most psychosomatic complaints. Toward the end of the century, William Cullen defined neuroses and firmly settled the nervous system as the source of these complaints, but many of these early physicians continued to invoke spurious causes, such as irritation or inflammation of nerves, to explain symptoms. This fallacious pathophysiology cul-

minated in the concept of spinal irritation, which persisted for close to a century. Most of the patients described to be suffering from spinal irritation had obvious hysterical symptoms. It is also interesting that about this same time the medical use of placebos was thoroughly documented. Nonspecific or sham therapies were found to be quite effective for the relief of many of the symptoms. The concept of spinal irritation was not given up in medical practice until the 1930s, and continues as a fundamental concept in chiropractic.⁷ The medical literature of the late 19th century is an incredible collection of erroneous explanations for psychosomatic symptoms.⁹

Over the years these symptoms have varied from hysterical seizures through paralysis, spinal pain, and headache, venereal symptoms, and fatigue. The complaints have cycled according to fashion and medical diagnoses. The failure of the medical profession to treat appropriately is based on these erroneous explanations, and is well documented. Gynecological surgery in women and sexual surgery in men was common. Hypnotism was developed largely to treat these kinds of psychosomatic symptoms. The great neurologist/psychiatrist Charcot based his career on the treatment of hysterical patients. His concept of neurasthenia to describe the malaise and inanition that these patients often feel is with us today.

It is of interest that these symptoms change as fashion changes and as generations of physicians are supplanted by new doctors with new diagnoses. There seems to be little question that patients exposed to new diagnoses rapidly develop the symptoms ascribed to that diagnosis by the profession. The enormous publicity that these diseases can now have in an uncritical media has greatly accelerated the speed with which certain psychosomatic diagnoses, such as chronic fatigue syndrome, can become worldwide. It is fascinating to hear the uncritical arguments for the legitimacy of chronic fatigue syndrome as a true physical disease

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repeat those that were popular 300 years ago when psychosomatic disease was first introduced as a concept.⁹

Low back pain can be another of these common psychosomatic problems. However, this statement requires substantial elaboration for, as a generalization, it is not true. We have just completed an exhaustive study of more than 4,000 patients drawn from orthopedic and neurosurgical practices who suffered from low back pain and sciatica.⁴ These patients underwent a careful evaluation of their psychological state and a psychopathy rate of only 5% was identified. That is, low back pain sufferers in general demonstrated the profile expected of a normal ill population. By contrast, we have extensive psychological data obtained in more than 2,000 patients with chronic pain syndrome, most of whom were suffering from low back pain. In this group the incidence of antecedent psychiatric disease and personality dysfunction was 75%. We were careful to determine that historical evidence for the psychological abnormalities was present prior to the generation of the pain problem under treatment.⁴

In this same group of patients we examined the disability status of those with normal psychiatric profiles and those with psychiatric diagnoses. The former group with normal psychiatric profiles tended to have greater physical impairment, yet vocational and personal disability was rare. By contrast, those patients with diagnosed psychiatric dysfunction had less measured physical impairment, being indistinguishable from the normal population, and still were virtually all disabled, both personally and vocationally. Thus, it appears in our examination of more than 6,000 patients with low back pain of varying degrees that the most likely determinant of vocational disability is the psychiatric status of the patient prior to the onset of the apparently disabling symptoms. Patients without psychological co-morbidity are rarely disabled by pain or their physical impairments. Those with psychiatric co-morbidities are routinely disabled by their complaint of pain in the absence of substantial physical impairment.⁸

In our study of more than 2,000 low back pain patients who had undergone no more than one previous operation, the majority had had no previous surgery. We found a direct relationship between the presence of litigation and vocational dysfunction. Some 20% of our patient population were engaged in litigation. The data regarding vocational function and litigation status was striking. Patients who were not involved in litigation and who were working at the time they were first seen all returned to work. Successful therapy substantially improved their work capacity. Pain was predictably relieved. The outcome in terms of pain relief for patients involved in litigation was indistinguishable from those

who were not. That is, they achieved equally good pain relief. However, no patient in our study who was involved in litigation returned to work, in spite of an outcome apparently as successful as achieved by those patients who were not involved in litigation, all of whom returned to work. Thus, the only statistically significant factor predicting failure to return to work was involvement in litigation. No physical abnormality, diagnosis, or other demographic feature had any statistical significance. I should re-emphasize that the outcome for these patients in terms of pain relief was equally good in the two groups.⁴

I recently reviewed the Worker's Compensation programs for a white paper prepared for the Maryland Neurosurgical Society.^{1,2,10} In that paper I raised the hypothesis, which coincides with that of Loeser and Sullivan, that it is the system that produces the disability. There is a vicious cycle of prolonged disability in which all involved in the equation are acting in self-interest rather than providing a concerted effort to achieve maximum treatment and function for the patient involved.⁵ First, the reaction of the Workmen's Compensation system is laboriously slow, and approval for required treatments may take a very long time. There is no serious attempt to evaluate the outcome of these treatments. Both plaintiff and defendant lawyers act without regard for the eventual effect of the entire process on the patient. The insurance company lawyer simply wishes to minimize exposure and cost and therefore uses every effort to minimize disability, even when it is legitimate. The plaintiff's lawyer wishes to maximize recovery and does not differentiate between the malingerer, the psychosomatic patient in serious need of psychiatric treatment, and the individual who has had a disabling injury. The most reprehensible in this equation are the physicians aligned with the two opposing parties. In my experience plaintiff's physicians are easily identified in every community. They do unnecessary tests, discover trivial abnormalities without relationship to the supposed injury, and, unfortunately, often prescribe extensive therapy programs that are of little value. The most dangerous of these are those who proceed to surgery without appropriate indications, basing the indications for operation on the complaint of pain.

By contrast, the physician aligned with the defendant characteristically finds nothing wrong, even when obvious physical diagnoses are present, and typically evokes psychosomatic or psychiatric symptoms. It is quite common for them to imply malingering, in my experience.

There are two other points from our recent study, as yet unpublished, that are germane to these arguments. In a study of more than 1,600 patients subjected to every form of conservative care, including manipulation

and standard physical therapy measures, we could determine no beneficial effect of any conservative program on the complaint of low back pain.⁴ Yet physicians believe that conservative care is of great value and even require it before contemplating surgery.^{1,9} A second important point from our study relates to the efficacy of surgery in patients who are well selected.⁶ I previously mentioned a point that Loeser and Sullivan make from one of my earlier papers. That is, that the majority of patients presenting with failed back syndrome had no solid indication for the operation in the first place. By contrast, in our prospective evaluation of more than 500 patients undergoing many kinds of lumbar operations by expert spinal surgeons, the overall good outcome was above 90%.⁴ That is, these patients achieved satisfactory relief of pain, usually complete, and had substantial improvement in their functional capacities.

Another fault in this disability system is the failure of many involved to truly use data appropriately. There has been a substantial effort to curtail surgery on the low back uncritically. It is my view that, when indicated, surgery is the only thing that will benefit patients suffering from low back and leg pain. However, no more than 10% to 15% of patients I see are candidates for operation. In that 10% to 15% I expect over 90% to achieve satisfactory resolution of symptoms. By contrast, when patients are poorly chosen the success rate falls below 50%. Since poor choice is common in Worker's Compensation patients the results in that group are poor. Unfortunately, our own data indicate that even when the stringent criteria for surgery are applied to disability system patients, the return-to-work rate is negligible and a poor functional result of the procedure is therefore almost guaranteed. Failure to recognize the impact of litigation and the special circumstances for the disabled patients involved in the Worker's Compensation system has led some to condemn surgery in general.²

These facts lead me back to my original contention.

The real problem in the disability system is the failure of most involved to recognize the psychosomatic factors that play such an important role. Patients who are disabled by back pain have an inordinately high rate of previous psychological dysfunction, little physical impairment, little in the way of diagnosable disease, substantial co-morbidities, such as inappropriate drug use, and a strong vested interest in remaining disabled. No one knows which of these factors are most important, but our study clearly demonstrates that, if we only know the patient is involved in litigation, we can predict a poor outcome from all forms of therapy with great statistical certainty.⁴

None of this means that some of these patients do not have treatable problems, but it does indicate that their outcome will not be good unless all the co-morbidities,

including the stresses induced by the disability process, are treated.

There is great confusion among physicians concerning psychosomatic behavior. Many equate pain behavior with psychiatric disease or malingering. Pain behavior is that and nothing more. The other psychiatric diagnoses must be made on positive grounds, which are defined well beyond pain behavior. Many physicians fall back on a psychosomatic explanation when they fail to understand a disease and cannot make a diagnosis appropriately. Another physician may find an obvious abnormality. We must always guard against this predilection to call those things psychosomatic which we do not understand. The history of psychosomatic disease is replete with erroneous pathophysiological explanations that are now laughable in their errors. Nevertheless, it does not seem feasible that only those patients involved in the litigation process, among all the patients with chronic back pain, can harbor some unexplained diagnosis that will fully explain their complaints on physical grounds.⁹

It appears that the basic thesis of Loeser and Sullivan is correct. The system is the problem. I do not believe that the iatrogenicity is related to physicians alone. The entire system is dysfunctional and must be repaired. We need to educate physicians in the diagnosis of psychosomatic disease. Our laws must be modified to reflect a difference between psychosomatic and physical complaints. The financial welfare of the legal profession cannot be allowed to interfere with this differentiation. Often these patients are relegated to the least competent physicians. We need unbiased evaluations with recommendations for therapy from expert physicians who understand both pain and psychosomatics. Until these things occur, it is unlikely that anything will be done to improve this situation. The cost of the system is enormous, the inappropriate disability payments and medical costs are unconscionable, and the destruction of human potential because of inappropriate diagnosis and the absence of adequate therapy, the worst aspect of all. It would be a worthy undertaking for the American Pain Society to try to develop guidelines to rectify the current system of disability determination.

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