Guest editorial

Low-back pain

Are orthopedic surgeons missing the boat?

More than 15 years ago, in an address to the American Academy of Orthopaedic Surgeons (Nachemson 1976), I challenged my colleagues to spend more time with their back-pain patients, to critically evaluate our treatment, and to deepen our research efforts to better understand the causes and natural history of low-back pain.

Have we met this challenge? Judging by the skyrocketing costs in all the industrialized countries for this benign ailment (Waddell 1991), it does not seem to be the case. On the other hand, our research efforts have escalated, mirrored by the increasing number of articles published in general orthopedic and spine specialty journals. However, the clinical studies still largely lack validity; controlled, prospective trials are disappointingly rare. Also, too few scientists in areas like biochemistry and basic pain physiology and psychology have been enticed to join our forces.

During the last decade we have seen an enormous increase in imaging and surgical technology. CT, MRI etc. demonstrate anatomic changes which often have no importance at all for the patient's pain. New surgical methods are constantly being introduced and presented in uncontrolled case series. Orthopedists, trained for surgical solutions, are too quick to use the new screws, hooks, pins and needles, promoted by the inventors and the instrument companies despite mediocre results and many complications. If we are prepared to meet the challenge of back pain only by manual dexterity, we certainly will miss the larger spectrum of low-back disease.

At the same time epidemiologists and pain psychologists together with a pathetically small number of orthopedic surgeons (Waddell 1984) have clearly demonstrated the overwhelming impact of psychology on the low-back pain problem. We must familiarize ourselves with these very important studies, published mostly in not so readily available journals on pain and behavioral psychology.

There is also an increased awareness of back-pain problems among politicians, executives in industry and insurance companies, among practitioners of subspecialties like rheumatology, physical medicine and rehabilitation, and also among ergonomists, physical therapists and even chiropractors, who all have striven to prove their points in prospective controlled studies, sometimes with success.

The vast majority of patients with disabling back pain should return early to work, as advocated already 10 years ago (Nachemson 1983). Resistant cases may well benefit from behavioral-psychology techniques and some of the methods of symptom control, practiced by specialists mentioned above; we now have technology for diagnosis and control of chronic back pain.

Unfortunately, this does not apply to our surgical methods. Indeed, prior to the discovery in the 1930's of the slipped disk as a cause of sciatica, back pain did not belong to orthopedics. After 60 years of surgical experimentation we seem to have reached an impasse. Given the potential risks of our interventions with various ingenious contraptions for the lumbar spine, and the lack of clinically proven success, there should, perhaps with a few exceptions (Nachemson 1992), be a moratorium on unproven invasive methods for the treatment of chronic low-back pain. The only reason to lift this moratorium should be prospective randomized trials of surgical methods, both old and new (Nachemson 1993).

This does not mean that orthopedics should totally abdicate the responsibility for back pain to our nonsurgical colleagues. A recent symposium, published as Supplement no. 251 to this issue of *Acta Orthopaedica Scandinavica*, clearly shows that less radical solutions also exist. Hopefully, the back pain epidemic (Allan and Waddell 1989) can be controlled by in-depth collaboration of specialists, supported by political understanding of the incentives for disability compensation.

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