NEUROLOGISTS AND SHOULDER PAIN

To the Editor: As busy clinically orientated neurologists working in a teaching hospital, we quite frequently see patients who have been evaluated elsewhere for shoulder pain.

To our surprise, these patients report that they have been referred to neurologists specifically for assessment of their shoulder pain. Most have never seen a rheumatologist. Even more surprising is that these patients report that they have had nerve conduction studies (NCS), needle electromyography (EMG) and evoked potential studies.

We are of the opinion that:

1. Neurologists, in general, have little more to offer than many other clinicians in the diagnostic evaluation of the patient complaining of shoulder pain without neurological symptoms or signs.

2. In the vast majority of cases, shoulder pain without neurological symptoms or signs is a consequence of disorders involving the soft tissues and joints of the arm (e.g. tenosynovitis, epicondylitis, rotator cuff syndromes and myofascial pain syndromes).

3. Rheumatologists, orthopaedic surgeons and physiotherapists are, in general, more skilled than neurologists at managing patients with shoulder pain, and these patients should preferably be referred to the rheumatological and orthopaedic specialties when diagnostic or therapeutic difficulties arise.

4. The sensitivity and specificity of NCS and/or EMG findings in diagnosing nerve root, peripheral nerve or muscular disorders in patients with shoulder and arm pain without neurological symptoms or signs is likely to be dismally low. There can be no medical or ethical justification for performing a diagnostic test with these properties, especially when the tests may cause discomfort and may impose substantial costs on the patient.

A Medline search from 1966 until the present failed to identify any studies evaluating the diagnostic usefulness of NCS and/or EMG in patients with arm or shoulder pain. In the crudely analogous situation in the lower limbs, a prospective study evaluating the diagnostic value of electrophysiological tests in patients with 'sciatica', motor and sensory nerve conduction studies, F waves and electromyography (EMG) were found to have low predictive values.[1] In another study, EMG was found to be no better than clinical examination in the diagnosis of low back pain and sciatica.[2] As arm and shoulder pain is likely to be less specific than 'sciatica' for the diagnosis of root compression, it is unlikely that these electrophysiological tests will be any more useful in patients with arm or shoulder pain in the absence of neurological symptoms or signs.

Nonspecific abnormalities on EMG may inadvertently be attributed to radiculopathies, prompting further unnecessary investigation, such as magnetic resonance imaging (MRI). Asymptomatic cervical and thoracic spondylosis is a common condition that is virtually invariably present in the elderly.[3] Likewise, asymptomatic bulging, protruding and herniated cervical, thoracic and lumbar discs are common in the general population.[4-8]

It is of concern that the unnecessary performance of NCS, EMG and cervical MRI studies may result in patients with isolated shoulder or arm pain being diagnosed incorrectly as having *symptomatic* cervical spondylosis or disc herniation.

The referral of patients to a neurologist because of a complaint of shoulder or arm pain without neurological symptoms or signs may on occasion cause harm. This may be in the form of financial loss to the patient and/or their medical aid scheme as a consequence of unnecessary investigations such as NCS and EMG. Of greater cause for concern, such an assessment may contribute to the decision to perform surgery on the cervical spine, which is likely to be of no value, has some risk and also implies substantial costs.

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LEGALISING ASSISTANCE WITH DYING IN SOUTH AFRICA

To the Editor: In the 'Personal View' by Landman,[1] he argues that physician-assisted suicide (PAS) and voluntary active euthanasia (VAE) are morally justifiable, not only for terminally ill adults but also for mentally and emotionally competent minors and patients with chronic degenerative conditions and mental disorders, where life 'ceases to be worth living'. Two moral principles of *autonomy* and *mercy* are being presented as serving the ends of justice for PAS and VAE.

Moral principles always operate within relative as well as absolute limits. If moral principles have no absolute limits, but