Surgical management of low back pain

To the Editor: Atkinson and Zacest[1] stated that chronic low back pain is reaching epidemic proportions for a variety of medical, psychosocial and work-related problems. The direct and indirect economic cost in Australia has been modelled at $9.17 billion.[2] The provision of surgery for non-specific low back pain (NSLBP) has the potential to significantly increase these costs, particularly under the economic cloak of "work cover". A review of chronic low back pain pointed out that only 15% of cases may be due to significant intervertebral disc prolapse with neural compromise.[3] The remaining cases were placed under the umbrella of NSLBP, which is a negative description of the failure to reach a diagnosis.

Low back pain, which accounts for 25% of cases of NSLBP,[4] may originate in the sacroiliac joint, as in the context of pelvic girdle pain in peri-partum women. A northern European study[4] has described patients with such pain arising from dysfunction of the sacroiliac joint in the peri-partum period. Magnetic resonance imaging (MRI) failed to identify these patients, leading to the establishment of clinical criteria for the diagnosis.

The development of a working model of the pathophysiology has assisted in providing appropriate therapy for such patients, which resulted in measurable improvement in 80% of the patients with physiotherapy.[4] A scintigraphic technique, using single-photon emission computed tomography combined with computed tomography, has been developed and validated for diagnosis with high sensitivity and specificity.[4]

Although the role of the sacroiliac joint in lateralising low back pain (pseudo-sciatica) was identified in 1905, it has been lost from medical view since the 1934 study of intervertebral disc prolapse and neural compromise by Mixter and Barr.[5]

The sacroiliac joint may also be injured in trauma (sacroiliac joint incompetence) to the buttocks or low back and, in such cases, MRI scans will invariably be normal, resulting in the patient being classified as having NSLBP with psychological disturbance. Such patients may then be subjected to a variety of questionable treatments including surgery. Appropriate diagnosis and treatment can result in significant clinical improvement in about 25% of cases classified as NSLBP.[4]

Jennifer Saunders[1]
Mel Cusi[1]
Hans Van der Wall[2]

1 University of Notre Dame Australia, Sydney, NSW.
2 Concord Nuclear Imaging, Sydney, NSW.

hvanderwall@gmail.com

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