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Letter to the Editor

# Post-surgical spine syndrome

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### Dear Sir.

It is our view that the diagnostic terms post laminectomy syndrome (ICD-9 code 722.8) or failed back syndrome<sup>[1,4,8]</sup> are inaccurate, misleading, can be construed as disparaging, and should be discarded. We propose that these terms should be replaced with Post-surgical Spine Syndrome (PSSS).

Implicit in the terms is that pain and disability following spinal surgery is the result of failed or unsuccessful surgery. Not infrequently, patients report that following surgery, "my leg pain is gone, but my back still hurts." A significant number of these patients have facet arthropathy, [2] which was likely present before surgery. As pointed out by Wilkinson, [8] degenerated disk collapses, causes misalignment of the facet joint, which can result in facet pain. Diagnostic facet medial branch injections may help to determine who may benefit from radiofrequency rhizotomy. [5-7] Discectomy may lead to a further collapse of the disk and cause foraminal stenosis and secondary nerve root compression. [6]

The other flaw in the terms is the anatomical inaccuracy. There are other varieties of spine surgery than laminectomy. These include discectomy, anterior interbody fusion, posterior interbody fusion, pedicle screw, and other forms of arthrodesis. Furthermore, new techniques are constantly evolving.

The proposed term of Post-surgical Spine Syndrome encompasses all forms of spinal surgery. It also covers the pathological conditions that existed prior to surgery, as well as conditions that may be related to the surgery, such as nerve root compression or injury, epidural fibrosis, arachnoiditis, adjacent level degeneration, and spinal instability.

If accepted, the new descriptions for the existing ICD-9 codes will be as follows:

722.80 Post-surgical spine syndrome, unspecified region

722.81 Post-surgical spine syndrome, cervical region

722.82 Post-surgical spine syndrome, thoracic region

722.83 Post-surgical spine syndrome, lumbar region

When ICD-10 officially replaces ICD-9, the code for all PSSS will be M96.1.

The incidence of PSSS may be reduced by a meticulous neurological examination and careful patient selection. [3,7,8] The facet and sacroiliac joints should always be examined, particularly when the pain is predominantly in the lower back, or when it radiates only to the thigh or groin and not below the knee. Patients who have mild or no neurological deficits and whose radiographic or electrophysiological studies show minimal nerve root compression may benefit from a diagnostic selective nerve root injection, before making a surgical decision. Finally, referred visceral pain from the pelvic or abdominal organs should also be excluded by a comprehensive examination. Adherence to these simple guidelines can result in a significant reduction in the pain and suffering, as also the enormous financial cost of PSSS.[3]

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## Commentary

The authors are correct in stating that the terminology reflecting the patients' new or continued complaints of pain following spinal surgery is woefully inadequate. However their main focus is on the contribution of the zygapophyseal joint and to some extent the sacroiliac joint disease, to the spectrum of spinal pain as well as the type of spinal surgery carried out. They also note that the 'failed back syndrome' may well be considered as disparaging, and in many instances so it should be. In multidisciplinary pain treatment centers the vast majority of patients have pain originating in the region of the spinal structures. A high percentage of these patients have undergone surgery, in an unsuccessful attempt to correct the pain complaint. Analysis of these patients' psychological profile most often reveals underlying depression, anxiety, somatization, or all three.[1-7] In addition, especially in patients with somatization, a secondary gain, which has a cognitive component, also plays a role. Almost no such patients have had an appropriate preoperative psychological evaluation. Under such circumstances none of the accepted terms currently applied to patients with persistent pain after spinal surgery is appropriate. Furthermore, the literature is now clear that the aforementioned psychological disorders are 'red (or yellow) flags' that should alert the surgeon that no surgery should be carried out on that patient, except to save life or limb, and clearly elective spine surgery to alleviate pain primarily is not in that category. However, the 'post spinal surgery syndrome' is merely distinguished by the level of the spine involved and does not convey adequate delineation of the biopsychosocial problem.

A change in terminology reflecting all aspects of the patients' pain condition before and after spinal surgery is certainly warranted, but should be carried out in an adequately reflective manner. To that end, the appointed committees from the appropriate specialty societies including Neurosurgical, Orthopedic, and Pain Treatment Societies could convene in a single group to study and appropriately address such a terminology. The conclusions then could be addressed to the National Center for Health Statistics for consideration in the revision of the International Classification of Diseases (ICD) classification.

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# Commentary

SNI published this article with the commentary to state that the Post-surgical Spine Syndrome is a very complex problem that is influenced by the patient's organic and psychological problems. Merely listing different locations in the spine for pain syndromes is inadequate, but certainly better than what is being done. We need a better diagnosis of the reasons for the patient's pain. This diagnosis requires that the surgeon spend time with the patient to discover the functional and organic basis for the persistent problem. Drug addiction should also be considered.

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