Neurosurgery for chronic pain: the main surgical concern should be “anatomical repair” first

Marc Sindou

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It has been the worthy goal of “pain societies” over recent decades to establish, on a multidisciplinary basis, excellent Pain Centers. At present, their networks cover most of the territories belonging to the developed countries.

As a neurosurgeon intensively involved in neurosurgery for pain, I am concerned to see a significant number of patients referred for so-called “intractable neuropathic pain,” in whom the pain was not recognized or accepted as resulting from compressive mechanisms. A large number of such painful states belong to tunnel syndromes or radiculopathies/myelopathies developed in the frame of spondylosis.

Some of these correspond to patients who were not operated on but treated for long periods of time with high doses of pain-killers, including anticonvulsants and opioids, or who had repeated local injections of cortisone. The reasons for not having undergone surgery were variable. Of course, there were patients not willing to accept the uncertainty and risks of surgery. There were cases without clear-cut, clinical, laboratory, or imaging criteria for surgery. There were also misleading situations due to multiple (often compressive) pathologies. However, the

excessive doggedness of some “pain doctors” in treating chronic pain manifestations instead of their anatomical cause(s) should be deplored.

Another group of painful states correspond to patients who were operated on for a pathology but insufficiently. This is particularly true for patients who have undergone so-called minimally invasive procedures. Thus, it is not infrequent to observe the recurrence of symptoms after tunnel syndromes treated with endoscopy. Also, it is rather frequent to see patients with persistent pain after cervical root-spinal cord decompression together with arthrodesis or arthroplasty, in whom the bony resection was not extensive enough; in other words, with the osteophytes still in place in spite of a “nice” X-ray control of the metallic fixation stabilization. Additionally, it is not uncommon to have patients referred for residual pain after lumbar stenoses treated with laminectomy but with too minimal recalibration of recesses and foramens.

For all of these patients, before indicating “pain surgery”—especially neurostimulation or intrathecal morphine therapy—reappraisal of the possibility of “remaining compression” should be undertaken. If such a causal mechanism is retained, “anatomical surgery” should be considered first—and proposed—before irreversible neural degeneration occurs.

M. Sindou (✉)
Department of Neurosurgery, University of Lyon,
Hôpital Neurologique P. Wertheimer,
Groupement Hospital Est, 59, boulevard Pinel,
69003 Lyon, France
e-mail: marc.sindou@chu-lyon.fr