

Three-dimensional CT imaging in postsurgical "failed back" syndrome.

[Zinreich SJ](#)¹, [Long DM](#), [Davis R](#), [Quinn CB](#), [McAfee PC](#), [Wang H](#).

Author information

Abstract

One hundred consecutive patients with postsurgical "failed back" syndrome (PSFBS) without fusion and 100 patients with PSFBS with fusion were evaluated with direct CT, two-dimensional (2D) multiplanar, and three-dimensional (3D) imaging. In the patients with and without fusion, 3D images were found to best display the following: the surgical procedure and its extent, lateral neural foraminal narrowing, and fractures of the posterior elements. The 3D images enabled optimal demonstration of fusion: solidity, pseudarthrosis, incorporation of transverse processes and facet joints, and transitional syndrome. In the patients without fusion, 3D images provided improved appraisal of surgical results in 31%; it showed additional fracture(s) in 9%, better displayed lateral neural foraminal narrowing in 42%, and showed additional posterior element fractures in 11% as compared to axial and 2D multiplanar reconstructed (MPR) scans. Three-dimensional imaging uncovered incomplete fusion in 17%, transitional syndrome in 13%, and pseudarthrosis in 6%. Thus, the 3D imaging provided additional information over the direct axial and MPR images (2D images) in 56 of 100 patients without fusion and 76 of 100 patients with fusion. At our institution, this imaging modality is now routinely performed in this patient population.

[January–February, 1993](#) Volume 34, Issue 1, Pages 90–96

Three-Dimensional CT Validation of Physical Complaints in “Psychogenic Pain” Patients

[Nelson Hendler](#), M.D., M.S. 

,
[James Zinreich](#), M.D.

,
[Joseph G. Kozikowski](#), B.E.E.

The Mensana Clinic, Stevenson, MD

The Johns Hopkins University School of Medicine, Baltimore, MD

The University of Maryland Dental School, Baltimore, MD

Three-Dimensional CT Validation of Physical Complaints in "Psychogenic Pain" Patients

NELSON HENDLER, M.D., M.S.

JAMES ZINREICH, M.D.

JOSEPH G. KOZIKOWSKI, B.E.E.

A large percentage of the patients who seek medical advice for low back pain are inaccurately diagnosed.¹ These patients deserve multidisciplinary diagnostic evaluations, which may uncover previously undiagnosed physical abnormalities. In one report, 50% of the patients with chronic pain were referred for further surgery.² However, for some patients, negative findings do

not adequately correlate with the clinical features of pain. When this happens, physicians often rely on physical tests rather than clinical judgment and make a diagnosis such as chronic low back pain, lumbosacral strain, psychogenic pain, or conversion reaction.^{1,2} The patient, meanwhile, continues to have pain and progresses through four stages of psychological responses due to the pain.³ Each stage begins to appear after a set period of time, and by 6 months the patient has entered the third stage of chronic pain in which hypochondriasis, depression, and hysterical features emerge as the *result* of pain.^{3,4} At this point, because psychiatric problems are evident even in a previously well-adjusted individual, physicians become tempted to ascribe a large part of the patient's pain complaints to psychogenic pain,

Received October 19, 1990; revised June 20, 1991; accepted July 27, 1991. From the Mensana Clinic, Stevenson, MD; the Johns Hopkins University School of Medicine, Baltimore, MD; and the University of Maryland Dental School, Baltimore, MD. Address reprint requests to Dr. Hendler, Clinical Director, the Mensana Clinic, 1718 Greenspring Valley Road, Stevenson, MD 21153.

Copyright © 1993 The Academy of Psychosomatic Medicine.