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What Is the Diagnosis Here?

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I have several comments about the article by Dengler et al. First, pain is a symptom, not a diagnosis, and the assumption in this article is that the sacroiliac (SI) joint is the sole source of pain. An assumption like that is flawed without any description or discussion of a differential diagnosis. A differential diagnosis would include 1) degenerative L4-L5 disc, 2) a degenerative L5-S1 disc, 3) degenerative facets at L4-L5, or 4) degenerative facets at L5-S1. A degenerative disc can be treated with nonsteroidal anti-inflammatory medications and a core strengthening program with an endpoint of 5/5 strength from a perceived deconditioned state. There is no mention in this article of any degenerative changes or any spinal findings.

The authors say the SI joint is the source of pain in 15% to 30% of patients with chronic low back pain. That may so in the literature, but in my spine practice of 40 years, I have never seen that. One problem here is clarification of what is causing the perceived pain in that area. A pain generator needs to be described and proven. For example, aggravation of the gluteus medius muscles and the gluteus maximus, which become spinal extensors, can be the source of pain. There can be significant weakness in this muscle group preceding a back fusion or because of back pain, or after a back fusion because these muscles are overutilized as compensatory spinal extensors. Injections can relax the muscles around the SI joint and cause significant short-term benefits. Stretching of the gluteus medius and gluteus maximus with slight hip flexion and internal rotation across midline might also help.

The conservative treatment of 25 physical therapy sessions over the first six months is sort of irrelevant. I try to have people go to therapy 3 times a week for 4 weeks and then assess an improvement. Six months of therapy once or twice a week is not appropriate, especially without a clear diagnosis. It is mentioned that more intensive conservative management might be provided with better results, but nobody ever mentions what diagnosis they are treating.

The mention that the active straight leg raise showed no significant improvement in the conservative management group assumes that a straight leg raise is positive with a sacroiliac joint problem, and that is not the case. A straight leg raise is only positive at 30° with a windlass effect pulling the nerve root against

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a projection from the spine itself, as in a herniated disc. It is not diagnostic of an SI joint problem.

In their Discussion, the authors state that “the sacroiliac joint has very little inherent motion.” I agree with that statement, and without motion of the sacroiliac joint, is there really a problem? I find in my practice that sacroiliac joint arthrodesis is not needed. SI joint fusion is not a neurosurgical procedure, so therefore I question the validity of the neurosurgeon authors understanding the musculoskeletal system, the hips, stabilizers, and other non-neurological causes of back pain.

Finally, the article was totally funded by the manufacturer of the implant used in the study, which is a serious conflict of interest. Although that conflict is disclosed, the fact that the study sponsors participated in the study design, data interpretation, and writing of the report is disturbing.

Conflict of Interest: None Declared