

■ clinical contributions

# How Can We Integrate Alternative Approaches and Mainstream Medicine to Treat Chronic Low Back Pain?

## Introduction

Our patients are using alternative approaches to medical problems—both common and rare—and are spending more money per year on alternative therapy than they do on traditional medicine.<sup>1</sup> Unless we ask, we often are unaware that our patients are using alternative therapy.<sup>2</sup> Alternative approaches, when integrated into mainstream medicine, often broaden our treatment options, an advantage which is especially true when treating chronic pain.<sup>3</sup>

## The Case

A 64-year-old man who received disc surgery eight years ago was seen recently for failed back syndrome (impairment and disability after back surgery). Pain, which had worsened six months before without an inciting event, limited him to light duty at work and prevented him from getting a sound night's sleep. Initial diagnostic evaluation included evaluation by the departments of neurology, rheumatology, physical medicine, and rehabilitation and physical therapy. Examination results were normal, except for musculoskeletal strain and indefinite mild radicular symptoms. No bladder, bowel, or sexual dysfunction was noted. X-ray films showed no abnormalities except some age-related arthritis. The patient did not exercise, nor had he kept up with the back-strengthening program recommended to him by physical therapy after his disc surgery. The patient was moderately obese and smoked about half a pack of cigarettes a day.

## Diagnostic Evaluation

This patient profile is familiar, as is the frustration of trying to help these patients. There is little left to add to the evaluation at this point. I always do a physical

examination because there may be a new finding and because patients may expect an examination. Normal examination results reassure me that I am going in the right direction. For this patient, there are no additional findings from the physical examination.

## Treatment

I spend most of my time with this patient discussing lifestyle issues—in this case, the issues are traditional, although handled slightly differently than in traditional practice—and I make suggestions about alternative therapy appropriate to integrate into his care.

My six-pronged approach to treatment:

1. Lifestyle issues: Recommend weight reduction, increasing exercise, and smoking cessation.<sup>4</sup>
2. Biopsychosocial: Discuss job satisfaction and workplace ergonomics.
3. Cognitive and behavioral program: Address patient's pain and decreased functional status (ability to work).
4. Supplements: Prescribe glucosamine HCl.
5. Alternatives: Manual therapy and acupuncture—recommend either.
6. Devices: Consider using transcutaneous electrical nerve stimulation (TENS) unit.

## Lifestyle issues

I spend time probing the patient's motivation and readiness to change. I explain that patients who change lifestyle behaviors are most often motivated by:

1. fear (example: fear of poor health)
2. bargaining for rewards (example: If I exercise, I will hurt less.)
3. mentor factor (example: If I quit smoking, I will be a better role model for my kids.)
4. ego (example: If I lose weight, I will be more attractive.)
5. peer pressure

**Unless we ask, we often are unaware that our patients are using alternative therapy.**

By Lydia S Segal, MD, MPH

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6. relationship to a higher being
7. personal or other

In this case, I ask the patient if he has a sense of a previous successful style of change—big or small, fast or slow. For example, did he cut back on his smoking all at once or by one cigarette a day? I ask him to consider how ready he is to change now. At the end of the visit, I ask him to go home and spend some time thinking about previous motivators for change.

I will probably not persuade a patient to start doing back exercises unless the patient is ready to do them. I rely on the physical therapy department to teach exercises to the patient; I rely on my relationship with the patient to help identify barriers to exercising. My expectation is that the patient will make only limited progress on one lifestyle change after this visit. I schedule another visit three to six weeks later to discuss the patient's progress. At that visit, I reassure the patient that limited progress is not failure and that we just need to figure out the next barrier to change. Often, just getting a patient to think about changing lifestyle behavior is the biggest step.

#### **Biopsychosocial**

We know from the literature that job satisfaction is directly related to improving back pain.<sup>5</sup> Therefore, I spend a few minutes reviewing the patient's work situation, including job satisfaction and autonomy. If the patient is clearly unhappy, we spend some time reviewing options.

We might also review workstation ergonomics: ad-

justing chair height, adding wrist rests (to computer keyboards) or lumbar supports, or making other ergonomic changes may improve low back pain.

#### **Cognitive and behavioral education program**

Most Kaiser Permanente (KP) regions have these programs, which may be called chronic pain or chronic disease self-management programs or may be known as mindful meditation or mindful movement programs. Programs consist of two- to three-hour weekly or biweekly sessions held during six to ten weeks and are led by a multidisciplinary group of trained patient leaders, behavioralists, physicians, or any combination. Members with a variety of ailments participate (mixed disease model). Programs provide education about chronic conditions and chronic pain and teach patients self-management and relaxation response techniques. Numerous studies<sup>6</sup> show that the body's response to stress and pain can be changed using the relaxation response, the medical term applied to nonreligious meditation.

#### **Supplements**

Glucosamine has clinical evidence to support its use for treating osteoarthritis.<sup>7</sup> Glucosamine is available in a plain formulation or combined with chondroitin sulfate. Initially, I prescribe plain glucosamine for three months at the following dosage: 1000 mg three times daily (tid) for the first two weeks (loading dose) followed by 500 mg tid for ten weeks. Bone remodeling, determined on the basis of subjective improvement of symptoms (not x-ray examination), takes three months to occur. For some patients, the improvement will be 20%, for others 80%. I have yet to be able to predict who will respond and, if so, by how much.

Patients whose condition improves by taking glucosamine must realize that sustained improvement depends on taking glucosamine for the rest of their lives. Because the supplement costs about \$30 a month and is not covered by insurance, I check to make sure that my patients are taking a brand of glucosamine containing the active ingredient and whose manufacturer guarantees certain standards of product cleanliness and purity.

Because the supplement and herbal product industry is not well regulated, I ask the patient to use either the brand we carry at KP or a brand that is adequately rated by an independent testing lab and reviewed in [www.consumerlab.com](http://www.consumerlab.com). (See sidebar for other reliable Web sites for information on supplements and herbal products.)

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#### **Dr Segal's favorite Web sites for information on supplements and herbal products**

- **[www.consumerlab.com](http://www.consumerlab.com)**: Independent assessment of quality of supplements and herbs, nutritional products.
- **[www.usp.org](http://www.usp.org)**: US Pharmacopeia, which sets standards for prescription and over-the-counter drugs.
- **[www.nsf.org](http://www.nsf.org)**: NSF International, which ensures that labels reflect bottle contents.
- **<http://pkc.kp.org/>**: Within our Permanente Knowledge Connection Web page, three excellent databases for information on supplements and herbals can be accessed:
  - Micromedex
  - Natural Standards
  - Natural Medicines Comprehensive

### Manual therapy

If a patient has spine-related back pain but does not have a disc herniation, fracture, trauma, cancer, or other contraindication listed in the Mid-Atlantic Permanente Medical Chiropractic Referral Guidelines, I recommend a trial of manipulative or chiropractic care. If the patient has no improvement within four to six visits, I have the patient discontinue the trial therapy and reassess the choice of manual manipulation.

A variety of massage techniques may be beneficial for back pain. Massage therapy is not a member benefit in any KP region except for its Northwest Region, where state governments mandate that it be included in benefits. I recommend that patients receive deep-tissue or Swedish massage, and I instruct patients to communicate clearly with the massage therapist (before and during the massage) about the degree of pressure that is comfortable.

### Acupuncture

A variety of different types of acupuncture exist, including Chinese traditional, Japanese, Korean, and French Energetics. For a trial of six to eight treatments, I have no preference as to the type of acupuncturist—physician or nonphysician. Some data suggest that electroacupuncture may provide more benefit than simple acupuncture; acupressure and shiatsu using the traditional acupuncture ashi points may also be beneficial. I do not believe that underlying structural abnormalities, such as spinal stenosis, can be changed with acupuncture, but the pain such conditions cause might be alleviated.

### Devices

Two devices, a TENS unit and a magnet, have been found useful for a few patients. The evidence in the literature is not strong for efficacy of TENS units, but some people feel this form of electrotherapy helps.<sup>8</sup> Magnets, on the other hand, have NOT proved to help alleviate mechanical back strain.<sup>9</sup>

**I do not believe that underlying structural abnormalities, such as spinal stenosis, can be changed with acupuncture, but the pain such conditions cause might be alleviated.**

### Summary and Followup

For this patient, I recommend weight reduction, smoking cessation, exercise, taking supplements (glucosamine), and attending a cognitive-behavioral mindful meditation movement program. About halfway through a six-to ten-week program, I recommend starting either manual therapy or acupuncture. If the patient is resistant both to starting any lifestyle change and to attending a pain program, I recommend either acupuncture or manual therapy and schedule a follow-up appointment in a month. I use that appointment as a chance to reassess the patient's barriers to changing lifestyle behavior that interferes with recovery. ❖

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## Tense Muscles

Holding onto anger only gives you tense muscles.

*Joan Lunden, Television personality and author*