Directional Exercise Helps To Relieve Low Back Pain

BY BRUCE JANCIN Denver Bureau

ORLANDO, FLA. — A standardized mechanical assessment of patients with low back pain-whether acute or chronic-identifies a large subgroup who will obtain an excellent response when prescribed exercises matched to the directional nature of their pain, Ronald G. Donelson, M.D., reported at Wonca 2004, the conference of the World Organization of Family Doctors.

National guidelines state that physical activity is good for low back pain, and that there is insufficient evidence to recommend any specific exercises for management of this common and costly problem. That's no longer the case. A new mul-

ticenter randomized controlled trial demonstrates that in most cases the specific type of exercise prescribed has a great impact on patient outcome, according to Dr. Donelson of Hanover, N.H.

New Zealand physical therapist Robin A. McKenzie developed a method for subgrouping patients with low back pain (LBP) by having them repeatedly perform movements involving lumbar spinal flexion, extension, and lateral side glide. In roughly three-quarters of cases this assessment identifies a single direction of movement—called the patient's directional preference—that immediately improves the pain and/or centralizes it by moving the pain from the leg to the back, with the relief persisting after testing is finished.

The most common directional preference is extension, followed by lateral, and flexion. The minority of patients without a directional preference have a high likelihood of a prolonged episode or nonrecovery.

Dr. Donelson reported on an 11-center trial without commercial sponsorship in which 12 physical therapists who were formally trained and credentialed in mechanical diagnosis and treatment assessed 312 patients with LBP. Overall, 74% had a directional preference to their pain; they formed the study population. Among those, 83% preferred lumbar extension, 10% lateral, and 7% flexion.

These patients were randomized to one of three exercise programs. They received either an exercise prescription that matched their directional preference-for example, exercises emphasizing lumbar extension for patients having an extension preference-or exercises opposite to their directional preference, or nondirectional exercise.

"All three groups were given advice to stay active, a rationale for their particular exercise assignment, and reassurance of likely recovery. This educational content, when added to the nondirectional exercis-

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DR. DONELSON

es in group 3, strongly resembled guideline-based care," he said.

At entry, 40% of the patients were unable to work due to their LBP, and 24% had a work-related low back injury. The LBP was

acute in 13% of participants, subacute in 32%, and chronic-that is, of more than 7 weeks duration-in fully 55%. Overall, 70% of patients had a history of LBP episodes. Also, 47% had LBP only, 18% also had referred pain above the knee, 17% had pain distal to the knee, and 17% had one positive neurologic sign.

The primary study end point was selfassessed intensity of back and leg pain after 2 weeks. Pain was rated as better or resolved by 95% of patients randomized to the matching-exercise group, compared with 23% in the opposite-exercise and 42% in the nondirectional-exercise groups.

Most strikingly, 35% in the opposite and 33% in the nondirectional exercise groups withdrew from the study because their pain intensified or moved further distally or their neurologic status worsened. Not a single patient randomized to an exercise program matched to the directional preference of their LBP worsened or had to drop out.

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WOMEN'S HEALTH ADVISER Attention-Deficit Hyperactivity Disorder

p to 70% of children who have been diagnosed with attentiondeficit hyperactivity disorder continue to experience symptoms into adulthood, and as a result, as many as 8 million adults are affected. That figure may come as a surprise to clinicians who still think of ADHD as a childhood disorder.

Studies suggest that only 20% of adults with ADHD are diagnosed and treated for the disorder. And there are

a number of possible reasons for this treatment gap. First, the adult form of the illness was not recognized as a diagnostic entity until the late 1980s. Second. patients who were never diagnosed may have accepted their symptoms as personality flaws

or developed ways to compensate. Finally, others are regulars in the psychiatrist's office and are being treated unsuccessfully for comorbid conditions such as depression or anxiety.

Diagnosis

Most adults diagnosed with ADHD are self-referred. One of the most frequent stimuli for seeking help is that their own child has been diagnosed with the disorder. A combination of hyperactivity and inattention forms the most common subtype of the disorder; 70% of adult patients manifest that combination. A largely inattentive subtype occurs in 25%, and about 5% show the hyperactive/impulsive subtype.

Adults with ADHD are likely to display poor tolerance for frustration, temper outbursts, lack of social judgment, inability to organize daily tasks, lack of motivation, procrastination, risk-taking, and low stimulation. They are poor listeners, tending to interrupt. They frequently misplace items or forget appointments.

Adults with ADHD are highly likely to have comorbid depression, anxiety, or bipolar disorder. If untreated, they also have an increased risk of substance abuse, which many researchers believe is an attempt to self-medicate.

Several screening tools are available to assess the likelihood of ADHD. One of these includes a six-question patient self-report that can be supplemented with a longer physician screen. The screening tool identifies individuals at risk for ADHD so that they can be evaluated by their doctors. It's important to use a screen designed for adults, with questions that pinpoint very specific areas of impairment an adult is likely to encounter. One such screen and a self-assessment tool are available at www.med.nyu.edu/psych/training/ adhd.html.

Management

Adults with ADHD respond readily to the same medications used to treat childhood ADHD. Stimulants (methylphenidate and amphetamine products) are very highly studied in children, producing a robust, prompt response and a significant decrease in symptoms. But until recently, amphetamines had not been well studied in adults.

As a result, most adults were signifi-

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short-term action of the drugs

made them a less-

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In 2004, the Food and Drug Administration approved a mixed salts preparation of a single-entity amphetamine (Adderall XR) as a once-daily treatment

for adults with ADHD. With the approval of this extended-release formulation, stimulant therapy became more appropriate for adults.

Atomoxetine (Strattera) is the first nonstimulant therapy for adult ADHD. A selective norepinephrine reuptake inhibitor, atomoxetine relieves symptoms for as long as 12 hours and does not exacerbate comorbid tics or mood disorders. The drug is not a controlled substance, as are amphetamines. This is an advantage when treating a patient with a history of serious drug abuse. Some improvement may be noted in 5-7 days, but the full effect usually takes about 2 weeks to appear. The FDA recently stated that patients should discontinue the drug if they develop jaundice or have laboratory evidence of liver injury. Atomoxetine has been linked to two cases of severe liver injury.

Both classes of drug should be started at a low dosage and titrated upward until the patient achieves good symptom relief with minimum side effects. Most patients benefit from some form of adjunctive psychosocial therapy.

Medication compliance can be challenging in patients who have trouble remembering. Patients piggyback their medication onto another daily task, preferably one that is habitual. Segmented medication organizers can be helpful, especially if a family member or roommate can ensure the doses are taken at the correct times.

-Michele G. Sullivan

Sources: LENARD A. ADLER, M.D., head of the adult ADHD program at New York University, New York; RICHARD H. WEISLER, M.D., department of psychiatry, University of North Carolina, Chapel Hill, and Duke University, Durĥam, N.C.

