Physical therapy for back pain

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TO THE EDITOR: The January issue of the *Cleveland Clinic Journal of Medicine* featured a brief "POEMs" review[1] of a recent study[2] and concluded, "physical therapy adds little to back treatment." A careful review of the study, however, reveals a seriously flawed trial from which the POEMs staff seem to have uncritically drawn an inappropriately broad conclusion.

The study in question, by Frost et al,[2] included patients with back pain, leg pain, or both for at least 6 weeks. No critical analysis of distinct subgroups was performed. Patients with disk herniation and radicular symptoms were combined with patients who had simple myofascial mechanical back dysfunctional syndromes. Several recent studies and analyses, including one cited in the last paragraph of the POEMs review,[3] have demonstrated differing responses to activity advice and formal "disease-specific" physical therapy in these groups. The recent updated Cochrane review of activity advice in low back pain and sciatica concluded there were significant differences in outcomes related to activity advice in these two populations.[4]

Furthermore, the study by Fritz et al,[3] which the POEMs review says supports the inefficacy of physical therapy, in fact draws the opposite conclusion. In this randomized trial in patients with acute low back pain, the authors compared general nonspecific activity advice and exercise-oriented therapy with diagnosis-based specific physical therapy approaches. At 4 weeks, patients treated with diagnosis-based physical therapy had significantly better outcomes, including return-to-work status.

Similarly, another recent randomized trial in patients with acute, subacute, and chronic back pain demonstrated that physical therapy based on specific, standardized mechanical assessment produced statistically significant superior outcomes compared with general nonspecific exercise advice.[5]

Another serious flaw in the study reviewed by the POEMs staff is the failure to standardize the physical therapy arm of the trial. Seventy-six different therapists treated the 286 patients enrolled in the study. No standard evaluation or treatment approach was used. Therapists used a wide range of techniques, from hands-on mobilization to abdominal strengthening exercises. Any attempt to compare the efficacy of these radically differing approaches was not reported. Essentially, the POEMs staff accepted the premise that "all physical therapy is the same," as are all back and leg pain patients, in reaching the conclusion that "physical therapy adds little to back pain treatment."

The specialty of spine medicine has made significant advances in improving the quality of clinical back pain research in recent years with wide adoption of validated outcome measures and more careful identification and description of patient subtypes. Newer techniques permit identification of specific "pain generators" in some patients. Careful dynamic mechanical evaluation by well-trained physical therapists contributes to this improvement in diagnostic specificity.[6] The POEMs article draws an incorrect conclusion from a study that used dated methodology unacceptable in current clinical trials in spine medicine.

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