

CLINICAL INQUIRIES

From the Family Practice Inquiries Network

Does psychiatric treatment help patients with intractable chronic pain?

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EVIDENCE-BASED ANSWER

Tricyclic antidepressants and intensive multidisciplinary programs are moderately effective for reducing chronic back pain; tricyclics are also effective for diabetic neuropathy and irritable bowel syndrome (strength of recommendation [SOR]: **A**, meta-analyses and multiple small randomized controlled trials).

Cognitive therapies are modestly effective for reducing pain in the following: chronic back pain, other chronic musculoskeletal disorders including rheumatoid arthritis (SOR: **B**, multiple meta-analyses with significant heterogeneity), and for chronic cancer pain (SOR: **B**, 1 meta-analysis of various quality studies).

CLINICAL COMMENTARY**Consider tricyclics for all chronic pain sufferers without a contraindication**

Dealing with issues of chronic pain is frustrating for both clinicians and patients. With inability to relieve the patient's pain, confounding factors of medication overuse, noncompliance, and secondary gain or malingering often cloud the clinical picture. Add to this the high rate of comorbid depression, and it makes sense to use behavioral services in treating patient's pain.

But does it really help? The evidence indicates that behavioral treatment helps some, but it depends who is doing the treating, and the intensity of the therapy. By far the easiest evidence to put into practice is the use of tricyclic antidepressants, which should probably be prescribed to all chronic pain sufferers who do not have a medical contraindication, such as suicide risk or heart disease.

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■ Evidence summary

Amitriptyline and other tricyclic and tetracyclic antidepressants moderately improve pain control for patients with chronic back pain.^{1,2} The pain reduction was independent of the presence of depression, although patients who were depressed had a significant improvement in mood. The outcome on chronic pain of antidepressants with serotonin and norepinephrine reuptake

inhibitory activity is still being evaluated. It appears that those with only SSRI activity are not effective improving chronic pain.²

Tricyclics are effective for diabetic neuropathy (number needed to treat [NNT]=3.5 for 50% reduction of pain),³ and they are effective for reducing pain but not for global symptoms in irritable bowel syndrome.⁴ Amitriptyline reduces the pain of diabetic peripheral neuropathy in a dose-

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related manner up to 150 mg/d, although much lower doses are often effective and cause fewer anticholinergic side-effects.

For chronic back pain, a Cochrane review including 1964 patients found strong evidence for pain reduction and modest evidence for functional improvement from intensive (>100 hours) multidisciplinary biopsychosocial rehabilitation. Less intense and less comprehensive psychophysical programs did not reduce pain or improve function.⁵ It was unclear if the intensive programs were generalizable. Another review found that cognitive and progressive relaxation therapy had a moderate effect on short-term pain control vs waiting-list controls for chronic back pain. However, only a third of the studies were of “high quality,” and the total number of patients in the relaxation analysis was 39.⁶

A systematic review of 25 studies (1672 patients) found significant effect sizes for cognitive therapies in reducing pain and other symptoms in chronic musculoskeletal pain, including rheumatoid arthritis, fibromyalgia, back, and other pain syndromes.⁷ However, many of the trials were small or taken from “samples of convenience” from rehabilitation and pain clinics, and most lacked documentation of randomization. For rheumatoid arthritis alone, a systematic review of 19 studies found cognitive therapies had a small but statistically significant effect on pain, functional disability, depression, coping, and self-efficacy for 1298 patients at initial follow-up. However, only “tender points” and coping remained improved at subsequent follow-ups averaging 8.5 months.⁸

In adults with cancer pain, a recent meta-analysis of 1723 patients showed modest but significant effects on pain from psycho-educational interventions in 25 studies.⁹ Although just 3 of the studies lasted 52 weeks or longer, effects were found from good-quality studies for “relaxation-promoting,” educational, and supportive counseling plus content therapies.

A significant confounder in many of these studies may be that some treatments seem more effective in secondary care than

in primary care settings, as based on a systemic review of interventions for somatic symptoms in primary care.¹⁰

Recommendations from others

The NIH states that antidepressants are effective adjuvants in pain management, and that cognitive-behavioral treatments may be beneficial.¹¹ The American Society of Anesthesiology states that “the literature supports the use of antidepressants for reducing chronic pain without notable adverse effects.”¹² The Arthritis Foundation lists amitriptyline, duloxetine, fluoxetine, and paroxetine as treatment options for pain and for helping sleep in fibromyalgia.¹³

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FAST TRACK

While there is no evidence treating psychiatric illness impacts chronic pain, pain control is improved by some psychological agents and interventions