In Response:

We would like to thank Jasper for his comments on our articles entitled Evaluation of psychological status in chronic low back pain: Comparison with general population (1) and Do number of pain conditions influence emotional status? (2). Jasper raises multiple interesting and thought provoking questions.

One of the questions is why patients with two or more pain complaints should have greater prevalence of mood disorders versus controls? Fishbain also raised the same question (3). There is no clear-cut explanation (4).

The second question Jasper poses relates to the inclusion criteria in both studies for the control group, patients without chronic pain and psychotherapeutic drug therapy or pain or psychopathology. In spite of this, our results showed prevalence of depression in the control population of 5% (1), generalized anxiety disorder in 14%, depressive disorder in 8% of the patients and posttraumatic stress in 2% of the patients (2). The purpose of elimination of patients on psychotherapeutic drug therapy or known psychopathology was to compare apples to apples and oranges to oranges. We have shown that when psychological evaluation and diagnosis includes not only psychodiagnostic evaluation, but interview with the patient by the physician and/or psychologist, as well as consideration of psychotherapeutic drug therapy, the reccognition of the incidence emotional disorder of is higher compared to the evaluation by only psychodiagnostic testing (5). In a group of heterogenous population with 372 patients with diagnosis of emotional disorders made by not only psychodiagnostic evaluation but also by patient interview, questionnaires based on DSM-IV-R, and assessment by psychologist, including consideration of psychotherapeutic drug therapy, depression, generalized anxiety disorder, and somatization disorder were seen in 58%, 57%, 33% respectively. In comparison, patients suffering with only low back pain and evaluated by Pain Patient Profile (P3), clinical syndromes were depression 30%, generalized anxiety disorder 20%, and somatization disorder 20% (1). Similarly, evaluation based on pain conditions with MCMI-III evaluation (2), depression was seen in 22% of the patients with one pain condition in 32% of the patients

with two pain conditions, generalized anxiety disorder was seen in 30% of the patients with one pain condition and 54% of the patients with multiple pain conditions and somatization disorder was seen in 18% of the patients with one pain condition and 32% of the patients with multiple pain conditions. This clearly shows that if one should base the diagnosis only on the psychodiagnostic evaluation, emotional status is clearly underestimated. This also highlights the importance of psychological interview and consideration of psychotherapeutic drug therapy in evaluation of these conditions.

The third question posed by Jasper is about the management of these patients. Should these patients be managed differently than patients without psychological disorders? The answer should be yes. No diagnostic test should be performed unless it alters the management. Numerous guidelines emphasize evaluation and management of major depression and generalized anxiety disorder in primary care in patients with or without pain. Thus, it is imperative for an interventional pain physician to look at various aspects of emotional status (6). It will also be interesting, as Jasper has noted to follow the patients not only with surgery, but also following interventional procedures utilizing psychological status as an outcome measure. Multiple evaluations in the past have shown improvement of psychological status following appropriate management of pain in conjunction with improvement in functional status (7-9). Guidelines from the Institute for Clinical Systems Improvement on major depression, panic disorder and generalized anxiety disorder in adults in primary care (10) describe an algorithmic approach for assessment and management of depression and anxiety. They caution that many patients with depression and anxiety do not initially complain of depressed mood or anxiety, and providers need to suspect these diagnoses based on a profile of risk factors and common presentations.

Based on the above guidelines, an algorithmic approach in interventional pain management is presented (Fig. 1). Thus, an interventional pain management physician, by incorporating three simple questions each for depression and anxiety, either in their interview or comprehensive questionnaire could raise the standard of diagnosis. It is well known that a formal psychological interview by a psychologist and formal psychodiagnostic testing is not feasible in interventional pain management settings due to a multitude of reasons. Levy et al (11) described a depression screener to determine positive responses amongst patients with lumbar disc herniations and spinal stenosis. They showed a positive depression screener response was associated with poorer functional status and quality of life. Screening questions described by Bhagia et al (10) are as follows:

For Depression:

- Are you often sad, down, blue or teary?
- Do you have your usual interest in, and look forward to, enjoyable activities?
- Are you able to have fun or experience joy?

For Anxiety:

- Are you often worried? (are you a high-strung or nervous person?)
- Do you ever experience an “out of the blue” attack of fear of losing control, dying, fainting, “going crazy” or severe embarrassment?
- Are there places (e.g., shopping malls) or situations (e.g., parties) that you avoid or endure?

Three questions by Levy et al (11) for depression screening are as follows:

1. In the past year, have you had 2 weeks or more during which you felt sad, blue, depressed or when you lost all interest in things that you usually cared about or enjoyed?
2. Have you had 2 years or more in your life when you felt depressed or sad most days, even if you felt okay sometimes?
3. Have you felt depressed or sad much of the time in the past year?

It is well known that depression is a treatable cause of pain, suffering, disability and death, yet, depression is underreported. Further, depressed individuals are high utilizers of medical services, and are as functionally impaired as patients with severe chronic medical disorders (12-16). Outcomes of pain management will significantly improve if one pays attention to the existence of emotional disorders and manages them appropriately. It is also of importance to note that depression is common, not only with chronic pain and medical disorders, but also in the general population with a point prevalence of major depression in the general population of 4.5% to 9.3% for women and 2.3% to 4.5% for men (17). Similarly, anxiety disorders are also common in the general population.

The prevalence of generalized anxiety disorder varies

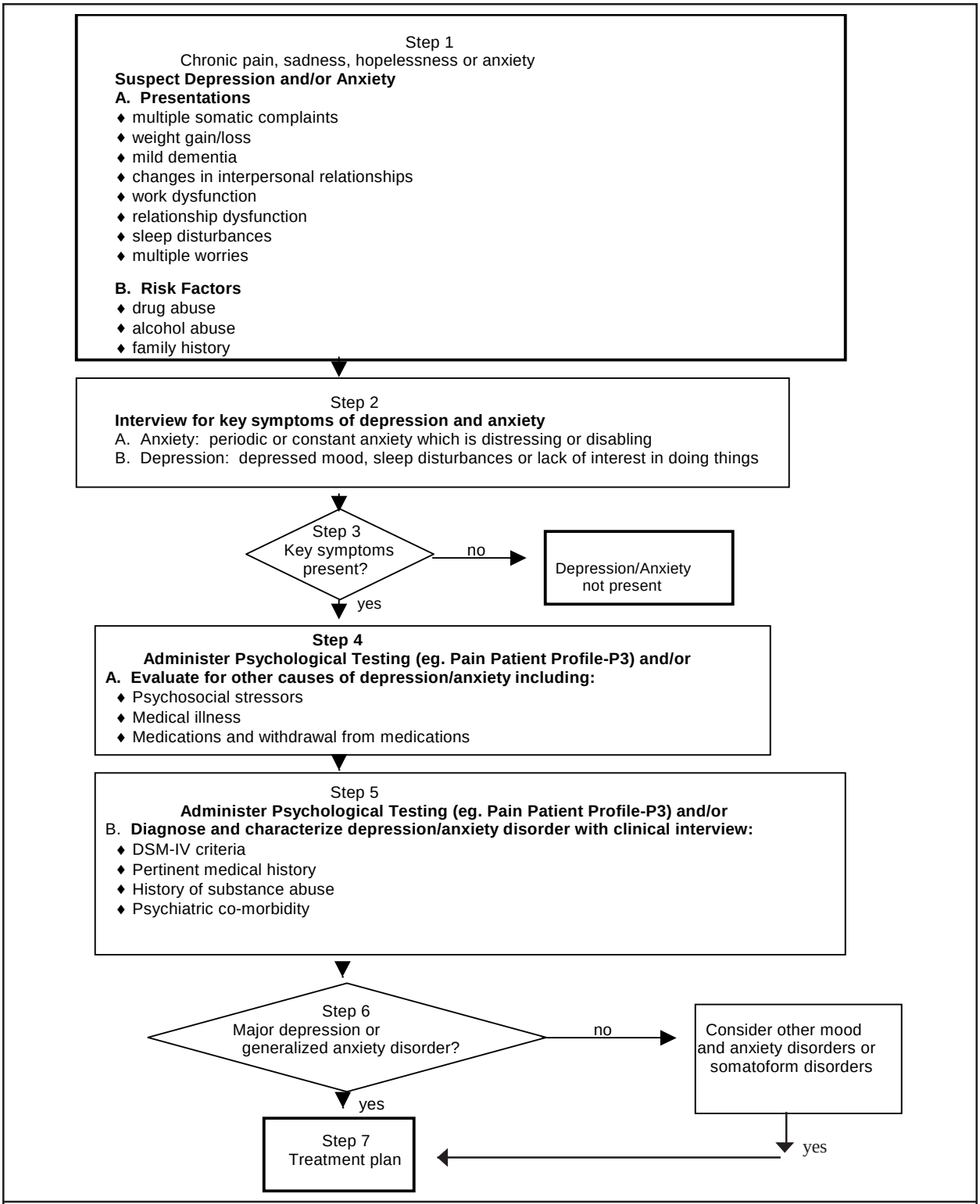

Fig. 1. Algorithmic approach for assessment of depression and generalized anxiety disorder
Adapted and modified from Bhagia et al (10)

from 2.5% to 6.4% and panic disorder in women of 1.4% to 2.9% and in men of 0.4% to 1.7% (17, 18). The prevalence of depression and generalized anxiety disorder are higher in patients suffering with chronic pain. Both pharmacologic and non-pharmacologic interventions may be effective depending on the severity of symptoms. Interventional pain physicians also should be aware of indications to refer a patient to psychiatric professionals for psychotherapy, as well as major psychotherapeutic drug therapy. Thus, supportive therapy by the physician in the interventional pain management setting is not the same as a course of psychotherapy with a mental health professional. Similarly, extensive evaluation by a psychiatrist with psychotherapeutic drug therapy is not the same as management by an interventional pain physician. Thus, physicians should be aware of these facts and consider early referral for psychotherapy or to a psychiatrist if psychological and psychosocial issues are prominent and/or patient requests it.

Finally, Jasper poses a question, what works best to chemically alter mood in order to improve pain, or to alter pain to improve mood? While altering the mood may improve pain in a small number of patients but insignificantly, improving the pain will alter the mood significantly. In addition, a combination is the optimum way to treat the patient with a true biopsychosocial approach.

In summary, as Jasper states, interventionalists first and foremost must accept that their patients do have psychological comorbidities and need treatment for the same. We should always the remember the dictum, never treat a patient's depression and anxiety with interventional techniques.

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Laxmaiah Manchikanti, MD

Pain Management Center of Paducah
2831 Lone Oak Road
Paducah, KY 42003