Editorials

A difficult combination:

chronic physical illness, depression, and pain

At present 41% of adult males and 43% of adult females report a long-term illness, and this figure is increasing as our population ages.[1] Long-term conditions have been at the centre of UK health policy since the mid-1990s, and managing increasing numbers of people with increasingly complex long-term conditions within a limited healthcare budget is one of the major challenges currently facing the NHS, and in particular general practice.

Overall, depression affects around 20% of patients who have a chronic physical health problem. This is two to three times the prevalence of depression in those with good physical health.[2] Severity of depression is influenced by the number and severity of symptoms, as well as the degree of functional impairment.

Patients with chronic disease together with depression tend to have poorer outcomes. For example, it has been shown that depression is a risk factor for increased morbidity and mortality in patients with diabetes, and that insulin resistance is more common in patients with diabetes and depression than diabetes alone.[3] For this reason, screening for depression in patients with chronic illness is considered good practice and rewarded in the UK with Quality and Outcomes Framework points.

PAIN AND DEPRESSION

Pain is commonly associated with many long-term conditions. Similarly, pain and depression commonly coexist. It has been shown that there is a 2.5–10 times increase in anxiety or major depression in patients with pain,[4] that pain in diabetes is strongly associated with depression ($P<0.001$),[5] and that the onset of depression is associated with an increasing number of pain locations ($P<0.001$) and higher severity of pain ($P<0.001$).[6]

Furthermore, there is concern that presence of pain negatively affects recognition and treatment of depression: depressed patients are more likely to present with pain symptoms than low mood.[7] Even when depression is recognised in conjunction with pain, clinicians are more likely to focus on treating the pain and are less likely to consider psychological treatments, leading to poorer outcomes.[7]

When pain and depression are recognised and the clinician does focus on treating depression, the presence of pain appears to increase the resistance of depression to treatment. It has been shown that those with moderate or severe pain are significantly less likely to achieve remission of depression, than those without pain (odds ratios 0.11–0.25).[8]

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A combined diagnosis of both pain and depression also accounts for a far greater healthcare utilisation in both primary and secondary care; patients with both pain and depression have an increased number of GP attendances, rate of investigations, rate of antidepressant drug switching, and referral rate to secondary care.[9] Combination of both pain and depression also has an additive effect on the work days lost through both sickness absence and productivity.[10]

A NEUROBIOLOGICAL PERSPECTIVE

Biochemically, depression can be attributed to a deficiency in the neurotransmitters serotonin, noradrenaline, and dopamine. There is now increasing understanding of the descending system of pain modulation whereby the periaqueductal grey matter acts as a relay between forebrain and midbrain structures and the brainstem. Within this relay are serotonergic and noradrenergic neurons that dampen pain signals.[11] However, when there is a deficiency of serotonin and noradrenaline, this system is likely to lose its modulatory effect resulting in increased pain, which is harder to treat.

MANAGING PAIN AND DEPRESSION

Chronic pain together with depression is difficult to manage. It requires a multidisciplinary approach and, indeed, a whole-person perspective to address physical, psychological, and social factors that may be contributory. Lifestyle measures, psychological therapies, and drug treatment all have roles to play.

When selecting an antidepressant drug, it is logical to choose one that boosts the common neurotransmitters that are involved in both pain and depression pathways. Antidepressants can be used in treatment of chronic pain but serotonergic-noradrenergic antidepressants (SNRIs) appear to be more effective than serotonergic antidepressants (SSRIs).[12] For example, duloxetine is an effective treatment for painful neuropathy, chronic pain, and fibromyalgia.[13]

SHOULD WE SCREEN FOR PAIN AS WELL AS DEPRESSION?

Screening for depression is well established in primary care for patients with long-term physical health conditions. There are a number of screening tools for pain, although most tend to be specific to particular types of pain such as back, knee, or neuropathic pain. Despite an extensive literature search, we were unable to find any screening tools that simultaneously could screen patients for both depression and pain.

Pain and depression are a common combination in people with long-term conditions. For patients with pain, depression often goes undetected, and untreated depression may adversely affect the ability to treat pain and disease-specific outcomes. Therefore, the argument for considering the inclusion of screening for pain when assessing patients with long-term conditions for depression is strong.

We believe that work is needed to develop and validate a combined screening tool for both pain and depression for use with patients suffering from long-term physical health conditions, and establish if screening,

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with appropriate management for those who screen positive, results in better outcomes for patients. Meanwhile, we urge you to remember that patients with chronic disease commonly have pain, which may exacerbate or mask their depression; and if an SSRI is not effective as a first-line treatment, an SNRI may be a useful alternative.

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