

Cochrane Corner

Tricyclics and Venlafaxine are effective for neuropathic pain but SSRIs may not be

Bruce Arroll, Professor of General Practice and Primary Health Care, University of Auckland

Correspondence to: b.arroll@auckland.ac.nz

The problem

Doctors see many patients with chronic pain. It is known that some of the anticonvulsants are effective for these pain syndromes and antidepressants are often given with apparent clinical benefit. For primary care physicians the issue is how much of this is due to a real drug effect and how much is due to placebo.

Clinical bottom line

Both tricyclic antidepressants (TCAs) and venlafaxine provide relief of neuropathic pain (NNT* = 3.6 and 3.1 respectively). This effect is independent of any effect on depression. There is very limited evidence that selective serotonin reuptake inhibitors (SSRIs) may be effective, but numbers of participants were insufficient to calculate robust NNTs.

Table 1. Antidepressants for neurological pain

| | Success | Evidence | Harms |
|---|-----------|------------------------------|--|
| Tricyclic antidepressant for neurological pain | NNT = 3.6 | Cochrane review ¹ | The NNH [†] for major adverse effects, defined as an event leading to withdrawal from a study, was 28 for amitriptyline. The NNH for minor adverse effects such as drowsiness, dizziness, dry mouth and constipation was six for amitriptyline. |
| Venlafaxine for neurological pain | NNT = 3.1 | Cochrane review ¹ | The NNH [†] for major adverse effects, defined as an event leading to withdrawal from a study, was 16.2 for venlafaxine. The NNH for minor adverse effects such as drowsiness, dizziness, dry mouth and constipation was 9.6 for venlafaxine. |

* NNT = numbers needed to treat for one person to prevent an infection

† NNH = numbers needed to harm for one person to get an adverse effect

References

1. Saarto T, Wiffen PJ. Antidepressants for neuropathic pain. Cochrane Reviews 2007, Issue 4. Art No: CD0005454. DOI: 10.1002/14651858. CD0005454.pub 2.

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