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pad Refills

Your dose of drug information in between details

Drug information question: Is venlafaxine (an SNRI antidepressant) more efficacious than SSRI antidepressants for generalized anxiety disorder?

One of the BC Provincial Academic Detailing (PAD) Service's 2020-2021 topics, Antidepressants: Drug Information offers participants the opportunity to discuss:

- how the efficacy of antidepressants is measured in clinical trials and reported in meta-analyses
- the quality and quantity of evidence that informs conclusions regarding antidepressant comparisons and combinations
- drug information relevant to the prescribing, deprescribing and monitoring of antidepressants

One of the common questions we receive during academic detailing sessions: *Is venlafaxine more efficacious than selective serotonin reuptake inhibitors (SSRIs) for generalized anxiety disorder?*

For **major depressive disorder**, we found that systematic reviews and network meta-analyses do not claim substantial differences in the efficacy of antidepressants.[1] Rates of discontinuation due to adverse events are higher with venlafaxine compared to several SSRIs (citalopram, escitalopram, fluoxetine and sertraline).[1] SSRIs are associated with a lower risk of morbidity and mortality in acute overdose and poisonings compared to venlafaxine, desvenlafaxine and bupropion.[1]

To address this question for **generalized anxiety disorder** we looked at the most comprehensive systematic review of published and unpublished trials (89 trials; 25,441 participants; 22 different medications).[2] This 2019 review shows us that:

- the common efficacy measure used in clinical trials is the Hamilton Anxiety Scale (HAM-A): a clinician-administered, symptom severity scale (14 items, total score ranges from 0 to 56).
- the median duration of the trials was 8 weeks and the median baseline HAM-A score of participants was 25.
- there are differences in the quantity of evidence for various antidepressants: citalopram 2 trials, 37 participants; fluoxetine 8 trials, 264 participants; sertraline 6 trials, 485 participants; duloxetine 8 trials, 1355 participants; escitalopram 13 trials, 1581 participants; venlafaxine 14 trials, 2275 participants.
- visual inspection of the forest plot in the review reveals that the mean change from baseline in the HAM-A score compared with the change in the placebo group, is similar in magnitude in the venlafaxine trials (2.69 point improvement) to that of SSRIs (citalopram 2.22 points, escitalopram 2.45 points, fluoxetine 2.43 points, paroxetine 2.29 points, sertraline 2.88 points).
- in the network meta-analysis of drug comparisons, venlafaxine was not statistically more or less efficacious than SSRI comparators (citalopram, escitalopram, fluoxetine, paroxetine or sertraline).
- venlafaxine and most SSRIs were not statistically more or less acceptable than placebo (i.e., no statistically significant difference in all cause discontinuations). With one exception, participants were statistically more likely to discontinue paroxetine compared with placebo (OR 1.24, 95%CrI 1.03-1.50).

Antidepressants approved by Health Canada for both major depressive disorder and generalized anxiety disorder include: escitalopram, paroxetine, duloxetine and venlafaxine.[3]

Conclusion: Current clinical trial evidence does not indicate that venlafaxine is more efficacious than SSRIs for generalized anxiety disorder.

[1]BC PAD Antidepressant Newsletter 2020 [2]SLEE Lancet 2019;393:768-77 (PMID: 30712879) [3]Health Canada Drug Product Database

BC Provincial Academic Detailing Service
Email: PAD@gov.bc.ca
Web: www.bcpad.ca