

VENLAFAXINE INDUCED HYPERTENSION: A CASE REPORT

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ABSTRACT

Venlafaxine is a newly introduced antidepressant that is clinically different from other antidepressants, possesses a slightly different mechanism of action and may have unique efficacy properties and a faster onset of action. A case of venlafaxine induced severe hypertension is reported to highlight the need for caution while using this drug.

Key Words: Venlafaxine, Venlafaxine induced hypertension, Drug side effects

Venlafaxine is a novel antidepressant that is chemically unrelated to tricyclic, tetracyclic and other available antidepressants. It is a phenylethylamine derivative which produces a potent blockade of both 5-HT and nor adrenaline uptakes. In this respect the pharmacological properties of venlafaxine resemble those of clomipramine. However, unlike clomipramine, venlafaxine has a negligible affinity for other neurotransmitter receptor sites and so lacks sedative and anticholinergic properties (Feighner, 1994). It is therefore classified as a selective serotonin and nor-adrenaline blocker (SNRI).

Current studies indicate that venlafaxine is more effective than placebo and at least of equal efficacy to other available antidepressants (Silverstone and Ravindran, 1999). Venlafaxine also appears to be effective in depressed patients, perhaps more so than fluoxetine (Tzanakaki et al., 2000). It is also possible that venlafaxine may be of value in treatment resistant cases (Mitchell et al., 2000). It has wide dose range from 75-375 mg/day in two or three divided doses.

Venlafaxine is generally well tolerated. However, the most worrisome side effect is the

sustained increase in blood pressure in some patients, particularly in patients receiving high doses.

CASE REPORT

A 55 years old lady reported to our OPD with features of depression. She was an old case of depression since 1975 and has had multiple relapses. During her previous episodes she had been given various combinations of antidepressants and mood stabilizers with no significant effect. She used to improve only after ECT of which she had been given several courses in the past.

In view of the above history, it was decided to give her a trial with venlafaxine. She was evaluated in detail and was found to have a blood pressure of 136/80 mm Hg. There was no past history of labile or sustained hypertension. She was started on venlafaxine 75mg/day in two divided doses which was increased to 150 mg/day in two divided doses over the next two weeks. Her blood pressure was periodically monitored and she remained normotensive. She did not show any improvement after three weeks of starting venlafaxine and her blood pressure recorded was

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150/98 mm Hg. She was advised to continue venlafaxine 150mg/day. Review after another one week revealed no improvement in her mental state and her blood pressure was 162/110 mm Hg.

Venlafaxine was stopped and she was advised to get her blood pressure monitored and report to the OPD after one week. However, she reported to our OPD after a fortnight and was found to be normotensive. She had been getting her blood pressure checked during that period. It had shown a gradual decline within three days of stopping venlafaxine.

She was then given a course of ECT with which she improved. She is being regularly reviewed and continues to be normotensive.

DISCUSSION

While the majority of clinical studies have reported that venlafaxine has not been associated with adverse effects on the CVS, a modest increase in blood pressure has been reported by several studies. An apparently dose related increase in systolic blood pressure (by 4 to 11mm Hg after a 125 to 250 mg dose) was observed after venlafaxine administration in 18 healthy volunteers (Fabre & Putman, 1987). In patients with depressive illness, an increase in diastolic blood pressure of 5.6 mm Hg versus baseline occurred following 6 weeks treatment with venlafaxine 375mg/day in divided doses (Schweizer et al., 1991). Our case developed severe hypertension with a relatively modest dose of venlafaxine (150 mg/day). She became normotensive after a few days of stopping the drug.

This case highlights the need for regular monitoring of blood pressure in patients on venlafaxine. The dose of the drug might have to be reduced or the drug discontinued in patients who experience a sustained increase in blood pressure.

Re-challenge with the drug was not tried in our case as the patient had improved with ECT

and has been maintaining improvement with imipramine. In fact, lower dose administration over a longer period might be a option in those patients who develop hypertension at a particular dose.

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