HEALTH RESEARCH ABSTRACT SUBMISSIONS

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Title of Research * BLOOD PRESSURE EFFECTS OF VENLAFAXINE AND DULOXETINE

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Introduction & Purpose * Duloxetine and venlafaxine, two commonly used serotonin norepinephrine reuptake inhibitors (SNRI), treat depression and other conditions. SNRIs have been associated with an increase in diastolic blood pressure during clinical trials. It is hypothesized the blood pressure effects are dose-related and result from increased norepinephrine availability. Both venlafaxine and duloxetine have been associated with increases in blood pressure but currently no study has compared the blood pressure effects of these two SNRIs.

Experimental Design * The purpose of the retrospective study was to compare the blood pressure change from baseline to first follow-up after initiation of venlafaxine to duloxetine. Secondary endpoints examined dose-related changes in blood pressure and analyzed blood pressure dysregulation by comparing changes in hypertensive medications after starting duloxetine or venlafaxine.

Results *

Seventy-two venlafaxine patients and seventy-three duloxetine patients were enrolled in the study. Follow-up blood pressure reading and medications changes were recorded an average of 75 and 238 days from baseline respectively. Venlafaxine increased systolic blood pressure by an average of 2.22 mmHg (±15.9) and diastolic by 0.54 mmHg (±11.2). Duloxetine decreased systolic blood pressure by 1.07 mmHg (±17.0) and diastolic by 0.21 mmHg (±10.8). These changes in systolic and diastolic blood pressure were not significantly different between groups (p=.231, p=0.684). Linear regression modeling did not show a dose-related change in blood pressure. There was no significant difference in the number of medication changes (0.13 (0.82), 0.25 (0.80); p=0.367) between groups.

Conclusions *

Our results showed no difference in blood pressure and antihypertensive medication changes during treatment with venlafaxine and duloxetine.