The effect of an L/N-type calcium channel blocker on intra-dialytic blood pressure in intra-dialytic hypertensive patients

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- Intradialytic hypertension (HTN), which is one of the poor prognostic markers in patients undergoing hemodialysis, may be associated with sympathetic overactivity. The L/N-type calcium channel blocker, cilnidipine, has been reported to suppress sympathetic nerves activity in vivo.
- 51 patients on chronic hemodialysis who had intradialytic-HTN and no fluid overload were prospectively randomized into control and cilnidipine (10 mg/day) groups. The primary endpoint was the change in the intradialytic SBP elevation before and after the 12-week intervention.
- Cilnidipine significantly lowered the post-dialytic SBP with an attenuation of the intradialytic SBP elevation from 12.0 ± 15.4 mmHg to 4.8 ± 10.1 mmHg.

Cilnidipine lowers both the pre- and post-dialytic SBP and might attenuate intra-dialytic SBP elevation. Therefore, Cilnidipine may be effective in lowering SBP during HD in patients with intra-dialytic-HTN