

Warfarin and Levofloxacin Drug Interaction-Cause for Concern?

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Numerous case reports have documented increased international normalized ratios (INR) caused by an interaction between fluoroquinolones and warfarin sodium. The majority of cases have involved ciprofloxacin, although, there have been case reports with levofloxacin and warfarin. These have been small in number and sparse with conflicting data for this interaction.

We conducted a retrospective review of outpatients enrolled in our pharmacist managed anticoagulation clinic (ACC) to evaluate the significance of an interaction of levofloxacin when added to a stable warfarin regimen. We utilized the EPIC

outpatient medical record database to identify all ACC outpatients who received concurrent warfarin levofloxacin therapy during January 2001-December 2001.

The results were no statistically significant changes in the INR for the 66 patients who met inclusion/exclusion criteria. No adverse effects were noted. Levofloxacin is a relatively safe fluoroquinolone to add to patients stable on warfarin therapy. Providing this information allows patients to receive levofloxacin (when appropriate) without undue concern of a drug interaction. We are in the process of developing a warfarin guide to inform patients of the most significant drug interactions with warfarin.

This initiative addresses Goal #5 of the ASHP 2015 Initiative.

QUALITY IMPROVEMENT TOOLS

- [ACC Policy and ACC Referral Form](#) (PDF)
- [Levofloxacin and Warfarin Data and Graphs](#) (PDF)

These "2015 Success Stories" highlight successes in implementing one of the ASHP [2015 Objectives](#). Tools and resources are also provided for each success story. For more information, email 2015@ashp.org or send your "Success Story" accompanied by a [permission form](#) (PDF).