Strategies of warfarin therapy in the elderly patients

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Introduction: Warfarin is one of the commonest causes of death related to prescription drugs, but when used appropriately it is one of the most beneficial drugs. In the elderly age adjusted doses are more appropriate, leading to less higher INR (International Normalized Ratio). The aim was to identify most frequent existent possible warfarin interactions in the hospital drug prescribing, analyze the effects of interactions on the warfarin dose for cardiological elderly patients.

Materials and Methods: In this study 100 patients (age >65) with indications for warfarin therapy from cardiological department of the hospital were included at the time from November 2010 to April 2011.

Results: Concomitant other drugs were analyzed which are known either to prolong the prothrombin time or INR or interact with warfarin such as amiodarone (25%), statins (13%), anti-inflammatory drugs (aspirin (4%)), proton pump inhibitor (omeprazole (4%))
In this study we found inverse correlation between starting dose of warfarin and maintenance dose of amiodarone ($r^2 = 0.94$, $p < 0.005$). When we calculated the dose of anticoagulant for these patients, it seemed to be decreased for 32% mean maximum in the warfarin dose being required by the elderly population with concomitant warfarin and amiodarone therapy (200mg/d).

Conclusions: The clinical caveats in the elderly include reduced starting doses, elimination of unnecessary medications and anticipating and monitoring for drug interactions, especially when prescribing warfarin and amiodarone.