

Review : To Study Adverse Drug Reactions of Angiotensin Converting Enzyme Inhibitors as an Antihypertensive Agent

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Abstract: *Background :* ACE inhibitors are a medication class used to treat and manage hypertension, a significant risk factor for coronary diseases, stroke, heart failure and number of other cardiovascular condition. Due to long therapy ACE inhibitors as an antihypertensive drugs are commonly associated with adverse drug reactions (ADRs). Therefore the study was conducted with the objective to examine the incidence of different types of ADRs in drug treated hypertensive patients.

Methods : A prospective cross sectional observational study was conducted in the outpatient of department of general medicine of primary care hospital in Chhatrapati SambhajiNagar. 120 diagnosed hypertensive patients were studied. Questionnaire was asked and their prscription were analysed and follow up was done.

Results : In our study total 120 patients were included. Total number of ADR reported was 65. In this study out of 120 patients, 70 (58.33%) were male and 50 (41.66%) were female. Most common ADRs Dry cough (10% to 20%), Dizziness (12% to 19%), Hypotension (7% to 11%) Increased BUN and creatinine (2% to 11%), Syncope (5% to 7%) and Hyperkalemia (2% to 6%) were reported. As per WHO-UMC scale, type of reactions and their percentage are as certain (9.23%), probable/likely (69.23%), possible (15.38%) and unlikely(6.15%). According to Naranjo scale, type of reactions and their percentage are as definite (9.23%), possible (15.38%), probable (69.23%) and doubtful (6.15%). Severity assessment is done by Hartwig and Siegel scale. No lethal ADR were reported. 6.15% reactions were severe, 24.61% were moderate category and 64 % were mild reaction.

Conclusion : Such type of studies would be useful for the physicians in rational selection of drug therapy for treatment of hypertensive patients . This present data suggest that the ADR monitoring needs to be done in hiopital settings continuously so that unexpected effect caused by different medicines can be identified and documented.

Keywords: Hypertension, ACE inhibitor, Causality assessment, ADR monitoring