

Dry Cough: A Major Limitation with Angiotensin Converting Enzyme Inhibitors in Nepalese Population

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Background

With the growing indications, Angiotensin Converting Enzyme Inhibitors (ACE- I) has become one of the most commonly prescribed medications in the clinical cardiology, Dry hacking cough or persistent throat irritation is one of the known side effects, which is possibly more common in the Himalayan kingdom of Nepal.

Method

Patients attending cardiology outdoor who had been prescribed ACE-I were included, Out of a total of 532 patients included. 344 (66.15%) had hypertension, 240 (46.15%) had Coronary Artery Disease, 168 (32.30%) had Left Ventricular Ejection fraction of less than 40%, and 24 (4.61%) had Chronic Obstructive Airway Disease. Enalapril was used in 252 (48.46%) patients with mean daily dose of 7.5mg, lisinopril in 172 (33.07%) patients with mean daily dose of 5mg; ramipril in 100 (19.23%) patients with a mean daily dose of 5mg, and ramipril in 4 (0.76%) patients with a mean daily dose of 75mg.

Results

Overall incidence of persistent dry cough that improved on switching over to Losartan was 22.55%, 56 (25.9%) patients on enalapril, 40 (18.51%) patients on lisinopril, and 24 (11.11%) patients on ramipril developed cough that improved after switching over to losartan.

Conclusions

Cough induced by ACE-I is an important clinical limitation that has no known remedy and always needs discontinuation of the medication. Also, the receptor antagonist may essentially not share all the advantages of ACE-I, Higher altitude, widespread use of smoking and possibly some genetic factors may be responsible for the higher incidence of cough in Nepalese population.