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## Losartan Induced Cough - A Case Report.

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### ABSTRACT

A 45 years male presented with hypertension. He was prescribed 5 mg amlodipine od, developed mild headache and tachycardia. He was put on 50 mg losartan od. He got irritating cough. Losartan was replaced by a low dose of amlodipine, patient got rid of cough. We are presenting this case report because cough is a rare.

**Keywords:** Hypertension, antihypertensive, cough, adverse drug reaction.

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## INTRODUCTION

Hypertension has been best managed by a variety of anti-hypertensive drugs available, given alone or in combination. The trend of rauwolfia extract, diuretics and short acting beta-blockers has seen a dramatic change to long acting beta-blockers, calcium channel blockers, ACE inhibitors and ARB blocking agents. As adverse drug reactions occur with most of the antihypertensive drugs, [1, 2] a safe antihypertensive drug without adverse effects is yet to come. Current recommendation to use ACE inhibitors as a first line of therapy has been in practice but for major adverse effect of dry irritating cough in quite a significant number of patients, requiring to switchover to another anti hypertensive drug. Angiotensin II receptor antagonists are quite often opted as alternative drugs with similar efficacy but without cough; possibly because of action on angiotensin I receptor level and nothing to do with ACE which is, when inhibited, leads to initiation of cough. A possible case of cough due to losartan is being presented because of its unusual nature of adverse effect i.e. cough.

### Case Report

A male patient of 45 years diagnosed as a case of primary hypertension of mild to moderate degree 150/90 mm of Hg was started with amlodipine 5mg/day. Adverse effects such as drowsiness, headache and tachycardia required changing the medicine and losartan was started 50mg/day. He was well-built, non-alcoholic, non-smoker without any history of significant respiratory disorder. He complained of dry irritating cough during his follow up visit after one and half month. Clinical examination revealed normal general physical examination and his BP was 120/80 mm of Hg. Throat and chest examination was inconclusive of any throat infection, sinusitis, bronchitis or asthma. Routine investigations including chest x ray were normal. A rare possibility of Losartan induced cough [3] was thought of and patient was advised to stop losartan and shifted to low dose amlodipine 2.5mg OD with reassurance. Patient got benefit after a week and showed improvement. This was sufficient to support the possibility of losartan being responsible for the cough. However rechallenge could not be done due to noncooperation of the patient. The mechanism of adverse drug reaction is not clearly known; possibly over expression of unopposed angiotensin II receptor in the CNS might be responsible for the cough. Any effect of ACE inhibition by losartan might be existing that needs to be further explored by pharmacologists.

### REFERENCES

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