Short-term Safety and Tolerability of Antihypertensive Agents in Korean Adults

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Background: Although antihypertensive agents are generally well tolerated, the occurrence of adverse reactions which cause withdrawal have been noted. In order to assess safety and tolerability of newly prescribed antihypertensive monotherapies, a prospective cohort study of hypertensive Korean adults was carried out.

Method: A total of 1,181 patients at 17 clinics were observed from July 1997 to August 1999. To ascertain adverse reactions associated with antihypertensive usage, we regularly followed the hypertensive patients at the interval of 2, 4, 8 and 12 weeks. Data were analysed using Kaplan-Meier method and Cox proportional hazard model.

Results: During the first 12 weeks following adverse reactions were detected; dry cough(7.5%), headache(6.1%), dizziness(3.9%), flush(3.7%), Impotence/frigidity(2.4%), loss of libido(1.9%), peripheral edema(1.8%), fatigue(1.8%) and palpitation(1.7%). The incidences of dry cough, headache, and flush in women were higher than those of men(P<0.05). The incidences of Impotence/frigidity and loss of libido in men were higher than those of women(P<0.05). The incidence of dry cough associated with ACE inhibitors(27.9%) was higher than those of other antihypertensive drug classes(P<0.01). The incidences of withdrawal due to adverse reactions were 15.7% in patients with ACE inhibitor, 15.2% with alpha blocker, 7.9% with calcium channel blocker, 5.3% with beta-blocker, 2.3% with diuretics, and 2.2% with angiotensin II antagonist, respectively.

Conclusion: The incidences of adverse reactions associated with antihypertensive agents were different by sex and antihypertensive drug class.