Abstract

Macrovascular complications are common in diabetic hypertensive patients. Appropriate antihypertensive therapy and tight blood pressure control are believed to prevent or delay such complication. Objective: To evaluate utilization patterns of antihypertensive agents and blood pressure (BP) control among diabetic hypertensive patients with and without ischemic heart disease (IHD).

Methods: Retrospective cohort study of all diabetic hypertensive patients attending Al-watani medical center from August 2006 until August 2007. Proportions of use of different antihypertensive drug classes were compared for all patients receiving 1, 2, 3, or 4 or more drugs, and separately among patients with and without IHD. Blood pressure control (equal or lower 130/80 mmHg) was compared for patients receiving no therapy, monotherapy, or combination therapy and separately among patients with and without IHD.

Results: 255 patients were included in the study; their mean age was 64.4 (SD=11.4) years. Sixty one (23.9%) of the included patients was on target BP. Over 60% of the total patients were receiving angiotensin-converting enzyme inhibitors (ACEI)/angiotensin receptor blocker (ARB), followed by diuretics (40.8%), calcium channel blockers (25.1%) and beta-blockers (12.5%). The majority (> 55%) of patients were either on mono or no drug therapy. More than 55% of patients with controlled BP were using ACE-I. More than half (50.8%) of the patients with controlled BP were on combination therapy while 42.3% of patients with uncontrolled BP were on combination therapy (p=0.24). More patient in the IHD achieved target BP than those in non-IHD group (p=0.019). Comparison between IHD and non-IHD groups indicated no significant difference in the utilization of any drug class with ACE-I being the most commonly utilized in both groups.

Conclusions: Patterns of antihypertensive therapy were generally but not adequately consistent with international guidelines. Areas of improvement include increasing ACE-I drug combinations, decreasing the number of untreated patients, and increasing the proportion of patients with controlled BP in this population.

Keywords
Hypertension, diabetes mellitus, drug utilization, Palestine.