OP-0229 - Primary and Secondary Prevention of Lower Extremity Arterial Disease in Chinese Type 2 Diabetes Patients

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Introduction

- Lower extremity arterial disease (LEAD) is associated with increased risk of cardiovascular mortality in type 2 diabetes patients
- It is often neglected as asymptomatic intermittent claudication.
- A paucity of data regarding the spectrums of preventing LEAD in Chinese diabetes patients in real-life setting.

Aims

- This study is
- To determine the manifestations of primary and secondary prevention for LEAD in Chinese diabetes patients.
 - To identify the treatment gaps relative to the guidelines recommendations and opportunities for LEAD management.

Methods

Patients from China DIA-LEAD study, which consecutively enrolled 7,113 inpatients and 3,568 outpatients aged 50 years and older who had been diagnosed with diabetes from 30 hospitals across China between June 2016 and January 2017, were included in present analysis and stratified into the groups of primary and secondary prevention by the existence of LEAD. Data regarding patient demographics, cardiovascular risk profiles, pharmacotherapies, lipid parameters and blood glucose measurements were recorded and analyzed. LEAD was defined as patients with established LEAD or newly diagnosed at the time of study visit by the Ankle-Brachial Index (ABI) and/or lower limb ultrasonography according to the Chinese Diabetes Society 2013 Guidelines on LEAD screening and management.

Results

Of the total 1,0681 patients, 78.8% (n=8,416) were in primary prevention group and 21.2% (n=2,265) were in secondary prevention group. Of the secondary prevention group, 10.6% (n=1,134) were diagnosed with LEAD before enrollment and 11.8% (n=1,131) newly diagnosed at the present visit. Patients in secondary prevention group were older than in primary group (68.0 vs. 63.2, p<0.001). There were no differences in the gender, BMI, alcohol consumption status and family history of premature CVD between the primary prevention group and secondary prevention group. However, the

proportions of patients smoking, comorbid with macrovascular diseases and microvascular diseases in secondary prevention group were higher than those in the primary prevention group (Table 1).

Table 1 patients' characteristics of primary and secondary prevention group

Variable	Primary prevention group	Secondary prevention group	p
Ratio(%)	78.80	21.20	
Age(years)	63.20	68.00	<0.001
With anti-hypertensive agents(%)	44.10	55.30	<0.001
With lipid lowering therapies(%)	46.20	52.00	<0.001
With anti-platelet agents(%)	35.30	45.60	<0.001
With vasodilator therapies(%)	31.30	47.00	<0.001
attainment of blood pressure(%)	57.30	46.30	<0.001
attainment of blood lipid(%)	42.90	41.10	<0.001
attainment of blood glucose(%)	28.60	26.70	0.078

The anti-hypertensive agents, lipid lowering therapies, anti-platelet agents, and vasodilator therapies were underused in both groups, compared with guidelines recommendations; even the percentages were higher in secondary prevention group compared with primary prevention group (44.1% vs. 55.3%, p<0.001; 46.2% vs. 52.0%, p<0.001; 35.3% vs. 45.6%, p<0.001; 31.3% vs. 47.0%, p<0.001). The goal attainment of blood pressure (<130/80mmHg) is significantly higher in primary prevention group than the secondary prevention group (57.3% vs. 46.3%, p<0.001). The goal attainment of blood lipid (LDL-C<2.60mmol/L, 42.9% vs.41.1%, p=0.156) and glucose (HbA1c<7.0%, 28.6% vs. 26.7%, 0.078) were sub-optimal in both groups.

Discussion

The current treatment approach is suboptimal in both primary and secondary prevention of LEAD in diabetes patients. Initiatives to improve multifactorial risk management may be mandated before designing primary and secondary prevention-specific strategies. Efforts are needed to optimize both therapy and risk factors control to further bridge the gap between guideline recommendations and real practice.