

Analysis of the effect of nine consecutive year's intensive management and number of achieving the target control on endpoint events in T2DM in Sanlitun Community Health Service Center in Beijing

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Objective: To investigate the effect of achieving the target control more than 3 times on endpoint events during 9 consecutive year's annual assessment in T2DM in Sanlitun Community Health Service Center in Beijing, including blood glucose, blood pressure, lipids profiles and the joint target control.

Methods: In Beijing Community Diabetes Study (BCDS), 224 patients with T2DM from Sanlitun community Health Service Center were enrolled in 2008. All patients were randomly assigned to the intensive management group (n=113) and the standard management group (n=111). All patients were followed up for nine consecutive years from January 2009 to December 2017. Systolic blood pressure (SBP), diastolic blood pressure (DBP), glycosylated hemoglobin (HbA1c) and low-density lipoprotein cholesterol (LDL-C) were detected as the main indexes, and the endpoint events were also carried out at the same time. The endpoint events were analyzed by using survival analysis (Kaplan-Meier method) based on management grouping and whether achieving the target control more than 3 times or not.

Results: During the nine-year follow-up, the abscission number is 35(14.29%), among which 14 (12.39%) is in the intensive management group, and 21 (18.92%) is in the standard management group. The incidence of diabetic retinopathy (6 cases, 5.41%) and diabetic nephropathy (13 cases, 11.71%) in the standard management group were significantly higher than that of intensive management group (1 case, 0.88%; 5 cases, 4.42%) respectively (P<0.05). However, there were no significant differences on the other endpoint events between the two groups (P>0.05). All-cause death is 23 cases, in which patients who achieved the target control (HbA1c, LDL-C) and the joint target control more than 3 times were significantly lower than that of less than 3 times (P<0.05). As far as death caused by cardiovascular events, cerebrovascular events and newly onset coronary heart disease is concerned, there were no significant differences on the afore endpoint events between the two groups based on target control more than 3 times or not (P>0.05). There were less incidence of new onset cerebrovascular events, stenosis or occlusion of large arteries and diabetic microvascular complications in patients who achieved target control (HbA1c, LDL-C) and the joint target control more than 3 times than those with target control less than 3 times (P<0.05).

Conclusions: The intensive management can effectively reduce the occurrence of microvascular complications, especially in patients who keep achieving the target control more than 3 times. The incidence of all-cause death and the other endpoint events decreased in T2DM who achieving the joint target control more than 3 times during the nine-year-management, which improve survival time and life quality.

Biography

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