Abstract: P2796

Biodegradable polymer everolimus-eluting stents versus durable polymer everolimus-eluting stents in diabetic patients: a 3-year propensity-matched study

Authors:
H Matsuda¹, A Kagase¹, T Tokuda¹, Y Ochiumi¹, M Takeya¹, K Sato¹, A Murata¹, Y Suzuki¹, T Ito¹,
¹Nagoya Heart Center - Nagoya - Japan,

Topic(s):
Coronary Intervention: Stents

Citation:
Background / Introduction: Diabetic patients are at high risk of adverse cardiovascular events after percutaneous coronary intervention (PCI) even with durable polymer drug-eluting stents. A biodegradable polymer everolimus-eluting stents (BP-EES) might improve clinical outcomes in patients with diabetes mellitus.

Purpose: This study aimed to compare the mid-term clinical outcomes between BP-EES and durable polymer everolimus-eluting stents (DP-EES) in diabetic patients.

Methods: We investigated consecutive 383 patients treated with BP-EES or DP-EES at our Heart Center between January and December 2016. Among these patients, 155 (40.5%) patients had diabetes mellitus. The primary endpoint was 3-year cumulative incidence of target lesion failure (TLF) defined as target vessel-related myocardial infarction (MI) and clinical-driven target lesion revascularization (TLR). Moreover, the incidence of definite stent thrombosis (ST) was also evaluated.

Results: After propensity score matching, 148 patients were divided into 2 groups (BP-EES; N = 74, DP-EES; N = 74). The 3-year cumulative incidences of TLF were significantly lower in BP-EES group than in DP-EES group (BP-EES vs. DP-EES; 1.4% vs. 11.4%, p = 0.01). The incidence of cardiac death, target vessel-related MI, and definite ST were none in the both group.

Conclusions: In diabetic patients, the incidence of TLR within 3 years was significantly lower in BP-EES than in DP-EES. In PCI for diabetic patients, BP-EES might improve clinical outcomes compared to DP-EES.
Abstract:

Biodegradable polymer everolimus-eluting stents versus durable polymer everolimus-eluting stents in diabetic patients: a 3-year propensity-matched study

Authors:

H Matsuda 1,
A Kagase 1,
T Tokuda 1,
Y Ochiumi 1,
M Takeya 1,
K Sato 1,
A Murata 1,
Y Suzuki 1,
T Ito 1,
1 Nagoya Heart Center – Nagoya – Japan,

Topic(s):
Coronary Intervention: Stents

Citation:

Background/Introduction: Diabetic patients are at high risk of adverse cardiovascular events after percutaneous coronary intervention (PCI) even with durable polymer drug-eluting stents. A biodegradable polymer everolimus-eluting stents (BP-EES) might improve clinical outcomes in patients with diabetes mellitus.

Purpose: This study aimed to compare the mid-term clinical outcomes between BP-EES and durable polymer everolimus-eluting stents (DP-EES) in diabetic patients.

Methods: We investigated consecutive 383 patients treated with BP-EES or DP-EES at our Heart Center between January and December 2016. Among these patients, 155 (40.5%) patients had diabetes mellitus. The primary endpoint was 3-year cumulative incidence of target lesion failure (TLF) defined as target vessel-related myocardial infarction (MI) and clinical-driven target lesion revascularization (TLR). Moreover, the incidence of definite stent thrombosis (ST) was also evaluated.

Results: After propensity score matching, 148 patients were divided into 2 groups (BP-EES; N = 74, DP-EES; N = 74). The 3-year cumulative incidences of TLF were significantly lower in BP-EES group than in DP-EES group (BP-EES vs. DP-EES; 1.4% vs. 11.4%, p = 0.01). The incidence of cardiac death, target vessel-related MI, and definite ST were none in the both group.

Conclusions: In diabetic patients, the incidence of TLR within 3 years was significantly lower in BP-EES than in DP-EES. In PCI for diabetic patients, BP-EES might improve clinical outcomes compared to DP-EES.