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**Background:** It remains unclear whether paclitaxel-eluting stents have an advantage over sirolimus-eluting stents and bare metal stents in dialysis patients. **Methods/Results:** Among consecutive patients who had undergone PCI with Stent between August 2006 and September 2008, we identified an index cohort of 39 patients (M/F=35/4, age:  $64 \pm 8$  y.o.) with 60 lesions who had been on chronic dialysis before PCI in my hospital. PCI using PES was performed in 13 dialysis patients with 23 lesions. Two control groups for comparison comprised 14 consecutive dialysis patients with 21 lesions using SES and 12 consecutive dialysis patients with 16 lesions who underwent PCI using BMS. We aimed to compare one-year clinical outcomes with the dialysis patients use of PES, BMS and PES. About patients characteristics, PES group was significantly elder, had higher prevalence of diabetes. About lesions characteristics, the Average stent length was longer in SES group than in PES and BMS groups ( $p=0.02$ ). Angiographic follow-up was scheduled within 1 year. After 1 year, the cumulative incidence of target lesion revascularization (TLR) was 4.4% in the PES, 19.1% in the SES and 12.5% in the BMS group ( $p>0.05$ ). After 1 year, the cumulative incidence of major adverse cardiac events (MACE), comprising cardiac death, nonfatal myocardial infarction, stent thrombosis, or TLR, and VT/VF was 4.4% in the PES, 28.6% in the SES and 25.0% in the BMS group ( $p=0.05$ ). Diabetic nephropathy is the most in the etiologies of renal failure in dialysis patients (66.7%), then we investigated the clinical outcomes about the Diabetic nephropathy. No significant difference was observed in TLR, but MACE during one-year follow-up was significantly lower in PES group compared with another 2 groups ( $p=0.04$ ). **Conclusions:** PES implantation is associated with decrease one-year MACE.