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Sirolimus-eluting stent (SES) exerted beneficial effects by markedly reducing the incidence of target lesion revascularization (TLR) and in-stent restenosis (ISR) in daily practice. However, the impact of SES for severe calcificated lesions after rotablator (RA) use was inconsistent. Therefore, we retrospectively compared the clinical and angiographic outcomes after SES implantation after rotablator use to severe calcificated lesions with that of bare-metal stents (BMS). As shown in Table, SES exerted better outcomes after ablation with RA than BMS with RA during approximately 500 mean-day clinical outcome despite total length was longer, diameter was smaller, and burr size was equivalent. Thus, SES after ablation with RA was safe and efficacious than BMS with RA.

Characteristics and Outcomes after Ablation with Rotablator with BMS vs. SES

	BMS	SES	
(n)	79	150	
Clinical outcome			
Followed up interval	560±611	482±334	NS
MACE	24	23	P<0.01
Cardiac Death	5	3	NS
re-MI	0	0	NS
Target lesion revascularization	19	20	P<0.05
rePCI	15	15	NS
CABG	4	5	NS
Non Cardiac Death	7	5	NS
Angiographic outcome			
(n)	56	121	
Pre-procedural			
MLD (mm)	0.97±0.54	1.02±0.58	NS
%DS	62.4±18.7	62.2±18.2	NS
RD (mm)	2.75±0.84	2.7±0.56	NS
LL (mm)	20.3±12.72	22.5±15.35	NS
Post-procedural			
MLD (mm)	2.66±0.59	2.4±0.47	P<0.05
%DS	11.35±11.4	13.5±11.3	NS
RD (mm)	3.01±0.79	2.9±0.56	NS
Acute gain (mm)	1.68±0.69	1.43±0.63	P<0.05
Followed-up			
MLD (mm)	1.50±0.65	2.0±0.734	P<0.001
%DS	42.2±23.02	29.9±20.6	P<0.001
RD (mm)	2.6±0.61	2.9±0.58	P<0.001
LL (mm)	16.01±11.1	6.53±6.69	P<0.001
Late loss (mm)	1.14±0.79	0.41±0.72	P<0.001
Binary restenosis (%)	35.7	17.4	P<0.05
Stent Diameter (mm)	3.30±0.49	3.04±0.34	P<0.001
Stent Length (mm)	31.5±17.8	48.4±20.4	P<0.001
Number of Stent	1.35±0.67	1.85±0.70	P<0.001
Maximum Pressure (atm)	16.2±3.5	20.5±2.9	P<0.001
Rotablator No	1.19±0.40	1.32±0.49	NS
Final burr size(mm)	1.76± 0.21	1.71±0 .17	NS