Longterm outcome after stenting of subclavian artery obstraction: a comparison between bare metal stent, drug-eluting stents and covered stents

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

- ☐ Consulting
- ☐ Employment in industry
- ☐ Stockholder of a healthcare company
- ☐ Owner of a healthcare company
- ☐ Other(s)

- ☒ I do not have any potential conflict of interest

Retrospective Cohort-Study

Single center

Comparing the primary patency in between different stent types

Demographics

Demographics and Clinical features at baseline	Number/Total (%) or mean±SD
Patient Demographics	
Gender	
Male	42/74 (56.8%)
Age (years)	59,8 ± 10,8
Comorbidities	
Diabetes	10/74 (13.5%)
Smoking (previous or current)	54/72 (75.0%)
Dyslipidemia	50/73 (68.5%)
Hypertension	52/74 (74.3%)
Coronary artery disease	16/73 (22.0%)
Chronic heart failure (NYHA II and III)	02/73 (2.7%)
Cerebrovascular disease	24/74 (32.4%)
Chronic renal insufficiency (grade 2-5)	17/74 (23.0%)
Peripheral artery disease at the lower limb	22/74 (29.7%)
Etiology	.
Atherosclerosis	68/72 (94.4%)
Vasculitis	1/72 (1.4%)
Cardiac bypass	1/72 (1.4%)
unknown	2/72 (2.8%)
Baseline blood pressure (mmHg)	
Systolic left	121,1±26,4
Diastolic left	78,9±14,9
Systolic right	140,5±41,4
Diastolic right	79,4±20

Angiographic features

Angiographic Features at Baseline	Number/Total (%) or mean±SD
Treated vessel	
Left subclavian artery	53/72 (73.6%)
Right subclavian artery	19/72 (26.4%)
Multivessel disease	30/73 (41.1%)
Lesion characteristics	
Lesion length (cm)	2,4±1,1
Lesion diameter (cm)	0,8±0,2
Chronic total occlusion	34/73 (46.6%)
Distance to A. vertebralis (cm)	1,7±1,4
Ostial lesion	50/73 (68.5%)
Calcification	
none	10/72 (13.9%)
little	37/72 (51.4%)
moderate	15/72 (20.3%)
severe	10/72 (13.9%)

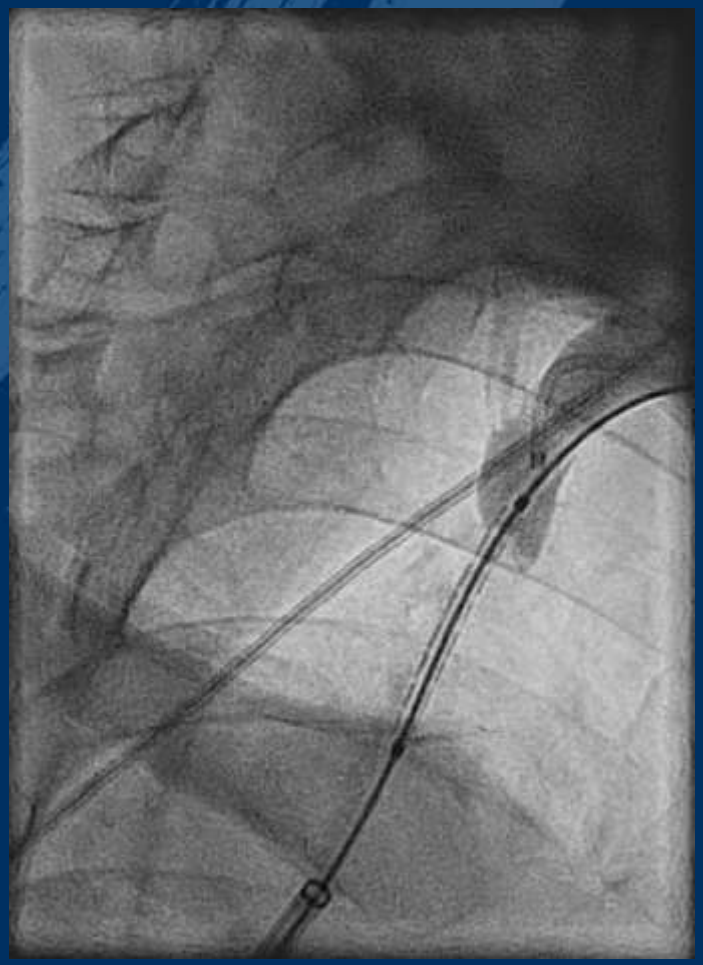
CART Technique with femoral and brachial approach
(47% CTOs)

CTO Chronic Total Occlusion
CART Controlled Antegrade Retrograde Subintimal Tracking

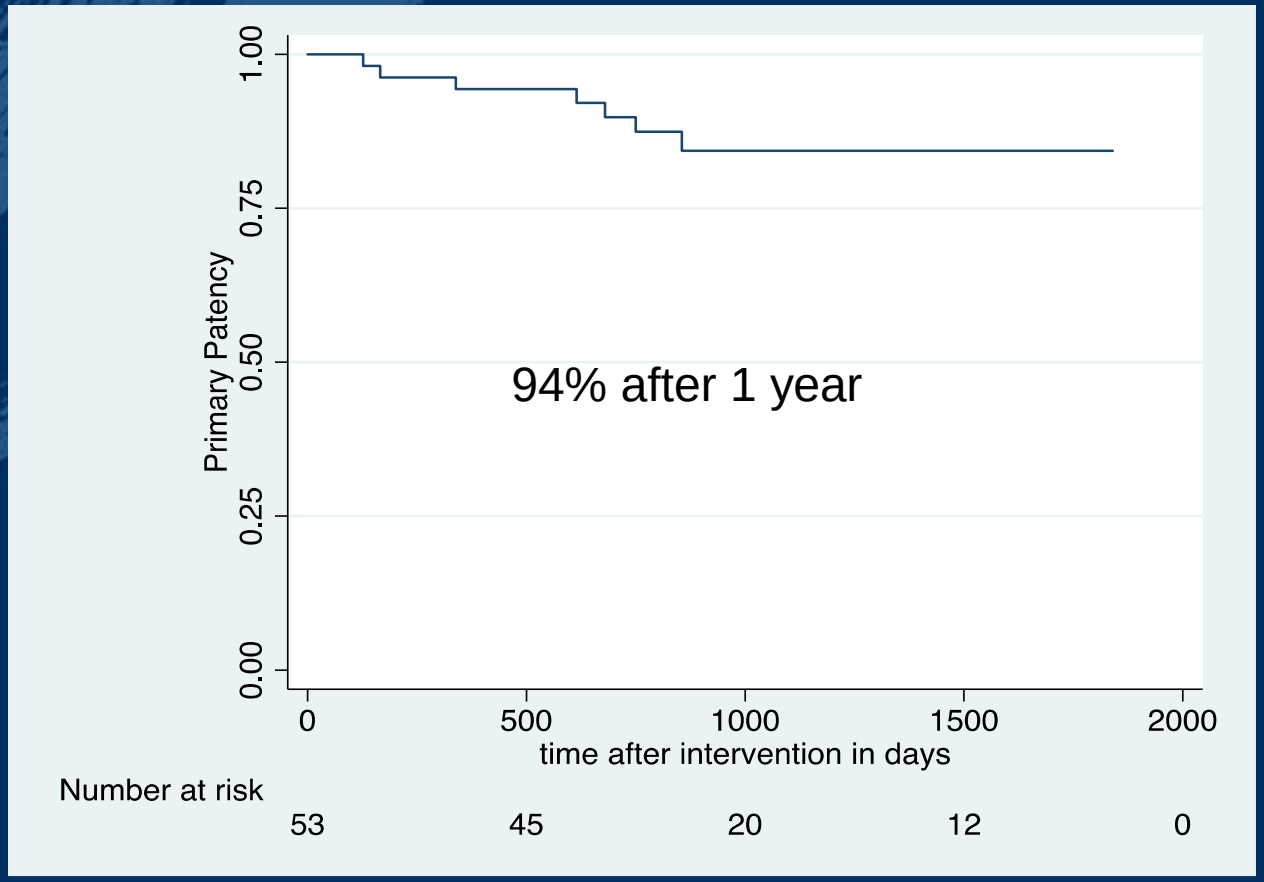
Intervention features

Intervention Features	Number/Total (%) or mean±SD
Successful intervention Residual stenosis (>30%)	74/74 (100%) 0
Stent type BMS (Balloon-expandable) **BMS (Self-expandable)** DES **Covered Stent**	 11/74 (14.9%) 28/74 (**37.8%**) 2/74 (2.7%) 29/74 (**39.2%**)
PTA only	4/74 (5.4%)
Stent length (mm) Stent diameter (mm) Balloon-size (mm)	28,2±7,1 8,3±1,3 5,7±1,4
Complications PSA Puncture side Stenosis other	 2/72 (2.8%) 2/72 (2.8%) 4/72 (5.6%)
Radiation Fluoroscopy time (min)	 11,9±5,5

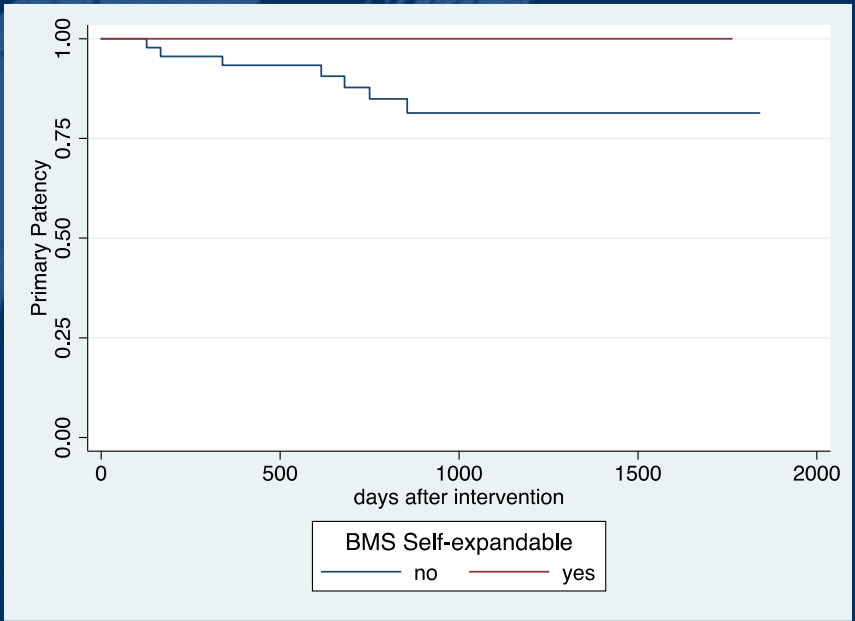
Implantation of a covered stent (Begraft 8/28)

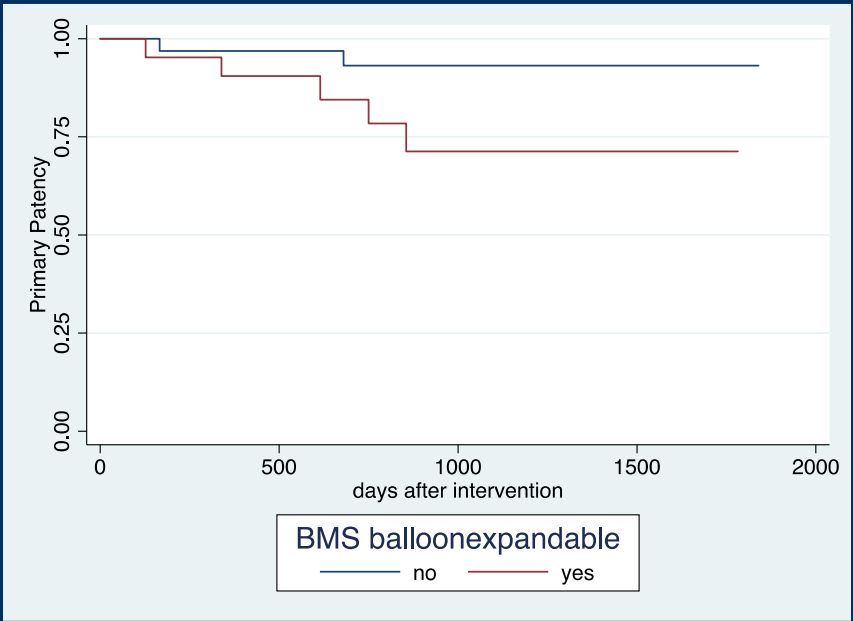


Primary Patency



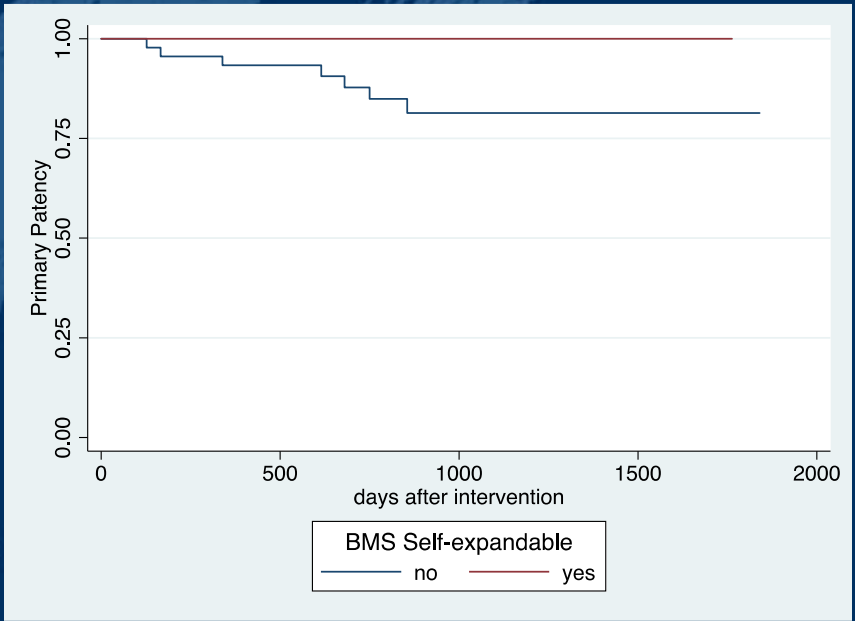
Comparison BMS

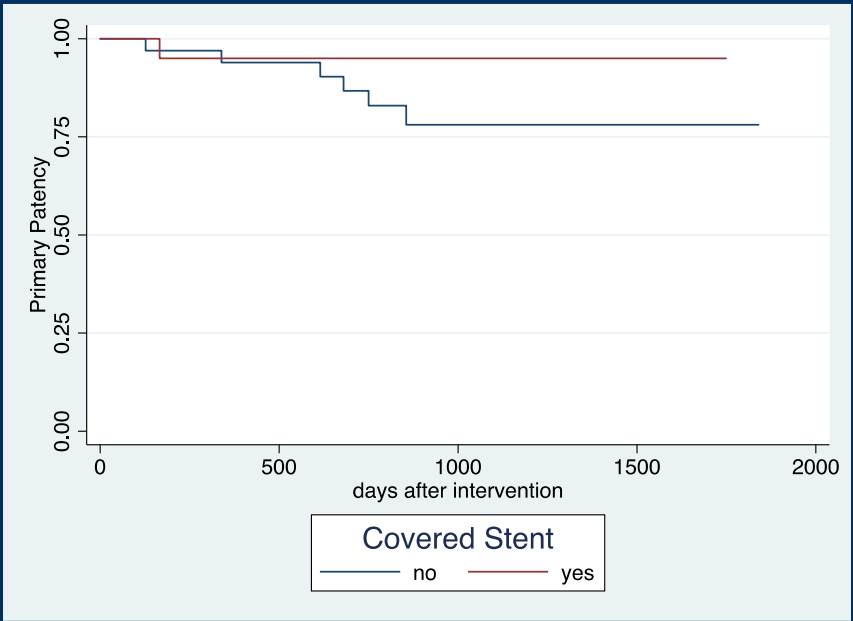




BMS…Bare Metal Stent

Comparison BMS vs. CS





BMS…Bare Metal Stent
CS…Covered Stent

Conclusion

Safe procedure with a high primary success rate

Good primary patency

Stenting is better than PTA

Good results for selfexpandable stents (BMS) and covered stents

Thank you for your attention.

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