and 35 patients with the Accutrak catheter. Procedural outcomes were analysed (Abstract 043 table 1) with detailed evaluation of pre-TAVI PPM, pre-procedure ECG, annulus size, pre-dilatation balloon size, CoreValve size, and post-dilatation in the two different groups.
Results 81 patients of the 91 had no pre-existing PPM. CoreValve prosthesis was deployed high, 3–5 mm, below aortic annulus. Factors previously identified as predictors of PPM requirement post TAVI, were similar in both groups (Abstract 043 table 2). A total of eight patients required a new PPM with a pacing rate post TAVI of 9.8%. There were 5 PPM implantations in the pre-Accutrak group and 3 in the Accutrak group. In the pre-Accutrak ppm group, 2 patients had sinus rhythm (SR) plus LBBB,1 AF and LBBB,1SR with RBBB and 1SR. In the Accutrak PPM group (3 patients) 2 had SR with RBBB and 1 with SR and 1st degree heart block. There was no significant difference in the pacing rate between the pre-Accutrak (10.9%) and post-Accutrak (8.6%) groups (p=1.0) in this matched cohort.

Abstract 043 Table 2

	Pre-accutrak (46)	Post-accutrak (35)	p Value
LBBB (n)	6	3	0.73
RBBB (n)	1	2	0.58
Mean aortic annulus size (mm)	22.5	22.4	–
Mean pre-dilation balloon valvuloplasty size (mm)	23.4	23.2	–
CoreValve size 26 mm	22	14	–
CoreValve size 29 mm	24	21	–
Post-dilation balloon valvuloplasty performed (n)	12	3	0.08
New Permanent pacemaker required post TAVI* (n)	5	3	1.0

*New pacemaker post TAVI within 30 days of procedure.

Conclusion The pacing rate was 9.8% post CoreValve TAVI, which is significantly lower compared to previous estimates. The reduction in pacing rate was due to a successful high deployment strategy and was independent of the Accutrak delivery system. Although the Accutrak catheter has modified CoreValve deployment, it appears to have had little impact on the pacing rate in our cohort. Further evaluation is required to establish whether the Accutrak delivery catheter facilitates a lower pacing rate in middle to low CoreValve implanting centres. We advocate a high CoreValve deployment strategy to ensure a lower pacing rate.

044 ENDOVASCULAR AND TRANSCATHETER MANAGEMENT OF COARCTATION-RELATED ANEURYSMS IN ADULTS

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Introduction Aortic coarctation surgery is associated with a late risk of aneurysm formation. This is particularly seen with patch aortoplasty repair. These aneurysms have a high risk of rupture in the long term as they are frequently false aneurysms. Redo surgery carries significant morbidity and mortality. We describe our experience in treating congenital patients with coarctation-related aortic lesions via endovascular stent grafting and complimentary transcatheter techniques.
Methods Between September 2006 and February 2011, 14 patients with congenital lesions had endovascular or transcatheter descending aortic interventions. 13 received stent grafting with the Medtronic Valiant system with two of these receiving associated vascular closure with the Amplatzer Vascular Plug (AVP 2). One patient had aneurysm closure with the combination of an Amplatzer septal occluder device and vascular occlusion coils. Data regarding these cases has been retrospectively analysed and described.
Results Fourteen patients were treated for late aneurysm formation following prior coarctation surgery (Patch aortoplasty n=10, end-to end anastomosis n=2, interrupted arch type with arch or subclavian to descending aortic Dacron bypass n=2; mean interval from index surgery 30 years (range 22–38 years)). Mean age at intervention was 40 (range 26–62 years). Two patients were treated as emergencies with haemoptysis secondary to fistulae and haemodynamic instability. One patient presented with pain and another with hoarse voice. All patients had successful treatments of the lesion without the need for reintervention. Mean follow-up is 24 months (range 2 months to 54 months) with no mortality and no significant endoleak. Four patients had non-life threatening complications (exercise left arm ischaemic symptoms requiring late vascular bypass, infected surgical vascular access site requiring re-operation, wound infection and re-exploration of neck for chyle leak—related to elective subclavian artery bypass and ligation of aneursmal subclavian prior to stent graft).
Conclusion Even in complex lesions, endovascular stent grafting with complimentary transcatheter and hybrid techniques provides an excellent option for congenital patients avoiding the risks of repeat surgery and the recovery from redo thoracotomy. Concern about the long-term performance of these grafts in young people would appear to be the only downside of this therapy.

045 SOCIO-ECONOMIC STATUS AND OUTCOME AFTER PERCUTAENOUS CORONARY INTERVENTION

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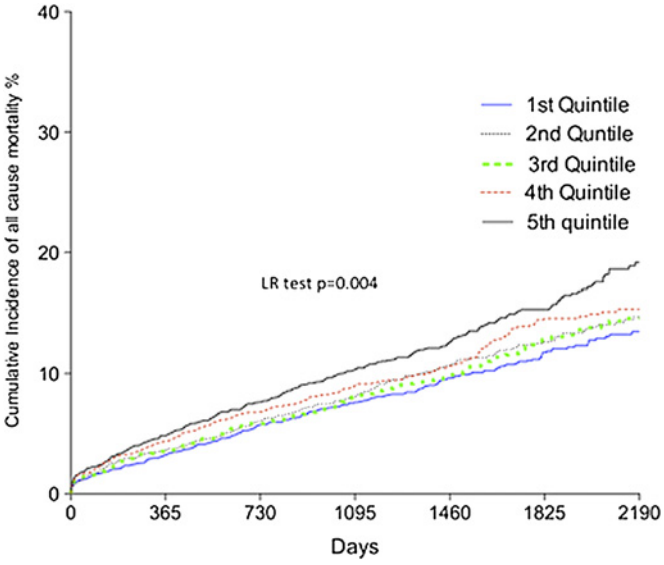
Introduction The effect of socio-economic status upon outcome after PCI is poorly defined. Limited data exists suggesting an association between social deprivation and worse outcomes following both CABG and myocardial infarction. We sought to determine the effects of socio-economic status (SES) upon long-term outcome after percutaneous coronary intervention (PCI).
Method This was an observational registry consisting of 13 770 consecutive patients undergoing PCI at a single centre (January 2005 to August 2011). SES was assigned to each patient according to postcode and ranked according to the corresponding British Index of Multiple Deprivation (IMD) score, which comprises five deprivation quintiles (Q1, least deprived; Q5, most deprived). The primary outcome was all cause mortality data obtained from the Office of National Statistics via the BCIS/CCAD national audit. Follow-up was for a median of 3.7 years (IQR 2.0–5.1 years).
Results Patients were predominantly male (74.0%) and Caucasian (71.7%), with a mean (±SD) age of 63.8±12.0 years. Median IMD score was 24.4 (13.4 to 38.4), and the total score for each IMD quintile is shown in Abstract 045 table 1. The characteristics of the study population across the five IMD quintiles are also shown in Abstract 045 table 1. Patients in quintile 5 (most deprived) were younger, more likely to be of Asian descent, to be current smokers and had higher rates of previous MI, previous PCI, diabetes mellitus and renal failure. They were also more likely to present as an acute coronary syndrome and have either moderate or poor ejection fraction. Kaplan–Meier estimates of all cause mortality showed increasing rates of long-term mortality for each increase in IMD score quintile, with patients in quintile 5 demonstrating significantly

Abstract 045 Table 1 Baseline Characteristics according to socio-economic quintile (*p value <0.05)

	Quintile 1 (n=2760)	Quintile 2 (n=2750)	Quintile 3 (n=2752)	Quintile 4 (n=2758)	Quintile 5 (n=2750)	p Value
Age	65.99±11.0	65.39±11.6	63.51±11.8	62.5±12.4	61.52±12.0	p<0.0001
Gender (female)	688 (25%)	693 (25.2%)	733 (26.6%)	755 (27.4%)	701 (25.5%)	0.19
Ethnicity (Asian)	163 (8.8%)	370 (20.5%)	411 (22.2%)	795 (41.0%)	932 (46.6%)	p<0.0001
Previous Mi	602 (24.0%)	645 (25.7%)	667 (26.2%)	679 (26.7%)	705 (27.9%)	0.03
Previous CABG	191 (7.4%)	247 (9.7%)	186 (7.2%)	213 (8.2%)	226 (8.7%)	0.01
Previous PCI	464 (18.2%)	564 (22.1)	571 (22.1%)	645 (25.1%)	697 (27.0%)	p<0.0001
Current Smoker	340 (12.3%)	383 (13.9%)	576 (20.9%)	619 (22.4%)	690 (25.1%)	p<0.0001
Diabetes Mellitus	423 (15.8%)	584 (21.7%)	596 (22.1%)	867 (32.0%)	915 (33.8%)	p<0.0001
Chronic Renal Failure	43 (1.7%)	59 (2.4%)	62 (2.4%)	67 (2.7%)	101 (4.0%)	p<0.0001
MV disease	881 (31.9%)	963 (35.0%)	866 (31.5%)	945 (34.3)	915 (33.3%)	0.02
EF: Poor	48 (4.9%)	77 (7.5%)	50 (4.7%)	61 (5.4%)	87 (7.8%)	0.02

higher long-term mortality compared with quintile 1 (p=0.0004) (Abstract 045 figure 1). Age-adjusted Cox analysis showed an increase in the hazard of death for quintile 5 compared to quintile 1 (HR 1.18 (95% CIs 1.01 to 1.39) and this was maintained with multiple adjustment (HR 1.62 (95% CIs 1.13 to 2.33).



Abstract 045 Figure 1 Kaplan–Meier curve showing cumulative probability of all-cause mortality after PCI comparing quintiles of socioeconomic status.

Conclusions Lower SES is associated with higher long-term mortality following PCI and is independent of other recognised risk factors.

046 IMPACT OF INCOMPLETE REVASCULARISATION IN PATIENTS UNDERGOING PCI FOR UNPROTECTED LEFT MAIN STEM STENOSIS

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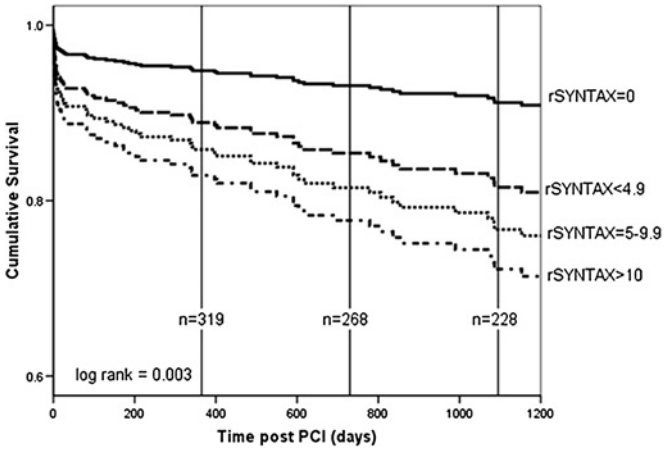
Aims To assess the impact of completeness of revascularisation upon outcome after PCI for unprotected left main stem (LMS) PCI in the "real world".

Methods and Results We studied 348 consecutive patients with LMS disease treated by PCI by a single operator with a policy of maximal feasible revascularisation between 2000 and 2011. The SYNTAX score was calculated before and after PCI (the residual SYNTAX (rSYNTAX) score) to gauge the completeness of revascularisation. The endpoint was mortality and repeat revascularisation. Average age was 68±10 years, baseline SYNTAX score was 33.6±15.2, 51% were non-elective, 10% were in cardiogenic shock and 49% were not surgical candidates. The LMS bifurcation was involved in 73% and 2.0±0.9 other vessels were diseased. Complete revascularisation was achieved in 49% and was associated with reduced mortality compared with incomplete, at 30 days, 1 year and 3 years (2.9% vs 13%, 5% vs 19%, 8% vs 26%; all p<0.0001). Median rSYNTAX score was 1 (0–11), 1-year survival for the lowest, middle and highest tertiles of rSYNTAX were 1.5%, 2.8% & 6.5% (p<0.0001), respectively. In multi-variate analysis, post procedure rSYNTAX score independently predicted outcome but pre-procedural SYNTAX score did not.

Conclusions In this single centre, "real world" series of patients with LMS disease treated by PCI, complete revascularisation was associated with superior survival vs incomplete. The rSYNTAX score, a novel index of completeness of revascularisation, independently predicted survival and the baseline SYNTAX score did not.



Abstract 046 Figure 1

047 TRENDS IN ACCESS SITE CHOICE AND PCI OUTCOMES: INSIGHTS FROM THE UK NATIONAL PCI DATASET

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