Sex-differences in outcomes after PCI or CABG for left main disease: from the DELTA registries

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Background: Women have worse outcomes than men after PCI, with some studies suggesting a lower mortality of CABG vs PCI in females.

Purpose: To assess the outcomes of CABG and PCI according to sex in a large registry population of patients with unprotected left main coronary artery (ULMCA) disease.

Methods: The DELTA and DELTA 2 registries are two multicentric, prospective registries evaluating the outcomes of subjects undergoing coronary revascularization for ULMCA disease.

Results: Total population was 6253 patients, 27% women. Table 1 shows baseline clinical characteristics. Median follow up was of 880 days. Women undergoing CABG had lower incidence of death, myocardial infarction (MI) or cerebrovascular accidentc (CVA) (HR 0.53, 95% CI 0.35–0.79) and a lower risk of death (HR 0.40, 95% CI 0.24–0.67). No significant differences were observed in men (Figure 1A). SIgnificant interaction was observed between sex and revascularization strategy for both outcomes (p<0.01-Figure 1B). CABG was associated with lower risk of target-vessel and target-lesion revascularization consistently inwomen and men (pint=0.49 and pint=0.89, respectively–Figure 1B).

Conclusions: In women undergoing coronary revascularization for ULMCA disease, CABG is associated to lower risk of death, MI or CVA. Further dedicated studies are needed to determine the optimal revascularization strategy in women with ULMCA disease.

Baseline characteristics

	Total (6253)	Females (1689)		Males (4564)		p
		PCI (1365)	CABG (324)	PCI (4002)	CABG (562)	
Age (years)	68±11	70±12	68±10	67±11	65±10	<0.001
Hypertension	4547 (73)	1090 (80)	236 (73)	2858 (71)	363 (64)	<0.001
Dyslipidemia	4244 (68)	968 (68)	228 (70)	2703 (68)	345 (62)	0.003
Never smoker	3765 (60)	1062 (78)	269 (83)	2196 (55)	238 (42)	<0.001
Diabetes	1916 (31)	474 (35)	100 (31)	1143 (29)	199 (35)	0.001
Chronic kidney disease	1219 (19)	353 (26)	9 (3)	830 (21)	27 (5)	0.024
Acute coronary syndromes	1106 (18)	469 (34)	35 (11)	1081 (27)	66 (12)	<0.001
Previous revascularization	2329 (38)	478 (35)	52 (16)	1716 (43)	83 (15)	<0.001
• Previous PCI	2040 (32)	411 (30)	48 (15)	1507 (38)	74 (13)	<0.001
• Previous CABG	512 (8)	100 (7)	13 (4)	389 (10)	10 (2)	0.008
LVEF	54±11	54±10	55±11	53±10	53±11	<0.001

Values are expressed as n (%) or mean ± SD. p-values refer to female vs male comparison.

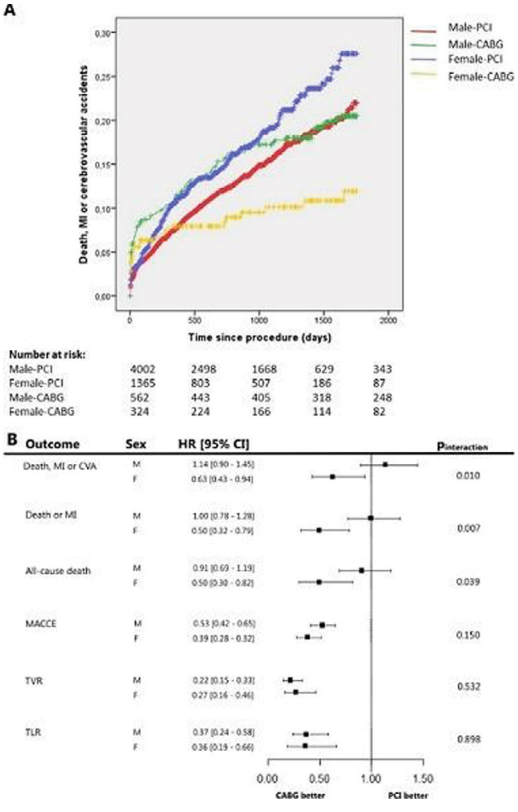

Figure 1