

Routine Screening Coronary Angiography and Adequate Coronary Revascularization is Important for Improvement of Clinical Outcomes of Patients with Critical Limbs Ischemia

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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

Backgrounds

- ✓ **Screening of Coronary artery disease**
- ✓ **Adequate Coronary Revascularization**
- ✓ **It may reduce the incidence of MACE for CLI patients.**



MACE: Major Adverse Cardiovascular Event, CLI: Critical Limb Ischemia

Purpose

- ✓ To assess the clinical implications of **screening CAG** for CLI patients.

CAG: Coronary Angiography

Methods

✓ **Study Flow**

✓ **Outcomes**

204 CLI patients underwent EVT

(Dec. 2011 and Mar. 2016)

Exclusion criteria

- ✓ History of CAD
- ✓ Elderly patients
(Over 81 years old)

83 CLI patients

CAG cohort

n= **34**

Non-CAG cohort

n= **48**

CAD: Coronary Artery Disease

Outcomes

✓ To evaluate the incidence of

1-year MACE

Outcomes

- ❖ **MACE (major adverse cardiac events)**
- ❖ **All-cause of death**
- ❖ **Acute coronary syndrome**
- ❖ **Re-admission due to heart failure**

Results

✓ **Patients Characteristics**

✓ **Patient's Limbs Status**

✓ **Freedom from events**

✓ **Patient's data**

underwent coronary revascularization

Patients Characteristics

	CAG-cohort n=34	Non-CAG cohort n=48	p value
Age, year	69.9 ± 8.8	70.9 ± 7.1	0.582
Men	25 (73.5)	38 (79.2)	0.551
Non-Ambulatory	9 (26.5)	15 (31.2)	0.639
Hypertension	23 (67.6)	32 (66.7)	0.926
Diabetes mellitus	20 (58.8)	22 (45.8)	0.246
Dyslipidemia	10 (29.4)	10 (20.8)	0.373
Smoking history	18 (52.9)	26 (54.2)	0.913
Hemodialysis	13 (38.2)	16 (33.3)	0.647
CVD	9 (26.5)	17 (35.4)	0.391

CAG: Coronary Angiography, CVD: Cerebral Vascular Disease

Values are presented as mean ± standard deviation or n (%).

Patients Characteristics

	CAG cohort n=34	Non-CAG cohort n=48	p value
Ejection fraction (%)	63.8 ± 8.4	63.2 ± 9.9	0.768
eGFR (ml/min/1.73m ²)	44.5 ± 33.5	46.8 ± 33.6	0.771
Albumin (g/dl)	3.68 ± 0.41	3.49 ± 0.63	0.108
CRP (mg/dl)	2.25 ± 2.78	1.83 ± 2.64	0.489
Hemoglobin (g/dl)	12.0 ± 1.9	11.4 ± 2.1	0.201
Medication			
Dual-antiplatelet therapy	6 (17.6)	10 (20.8)	0.720
Cilostazol	16 (47.1)	21 (43.8)	0.767
Anticoagulant therapy	7 (20.6)	9 (18.8)	0.836

eGFR: estimated glomerular filtration rate, CRP: C-Reactive Protein
 Values are presented as mean ± standard deviation or n (%).

Patient's Limbs Status

	CAG cohort n=34	Non-CAG cohort n=48	p value
Rutherford classification			
4	7 (20.6)	8 (16.7)	0.651
5	19 (55.9)	29 (60.4)	0.681
6	8 (23.5)	11 (22.9)	0.948

Values are presented as mean \pm standard deviation or n (%).

Patient's Limbs Status

	CAG cohort n=34	Non-CAG cohort n=48	p value
Target lesion of EVT			
AI	7 (20.6)	5 (10.4)	0.199
FP	3 (8.8)	11 (22.9)	0.095
BK	12 (35.3)	12 (25.0)	0.313
AI + FP	2 (5.9)	4 (8.3)	0.675
FP + BK	10 (29.4)	15 (31.3)	0.859
AI +FP + BK	0 (0.0)	1 (2.1)	0.397

AI: Aorta-iliac artery, FP:Femoropopliteal artery, BK: Below the knee artery

Values are presented as mean \pm standard deviation or n (%).

In **CAG** cohort

15

Pts

44%

received

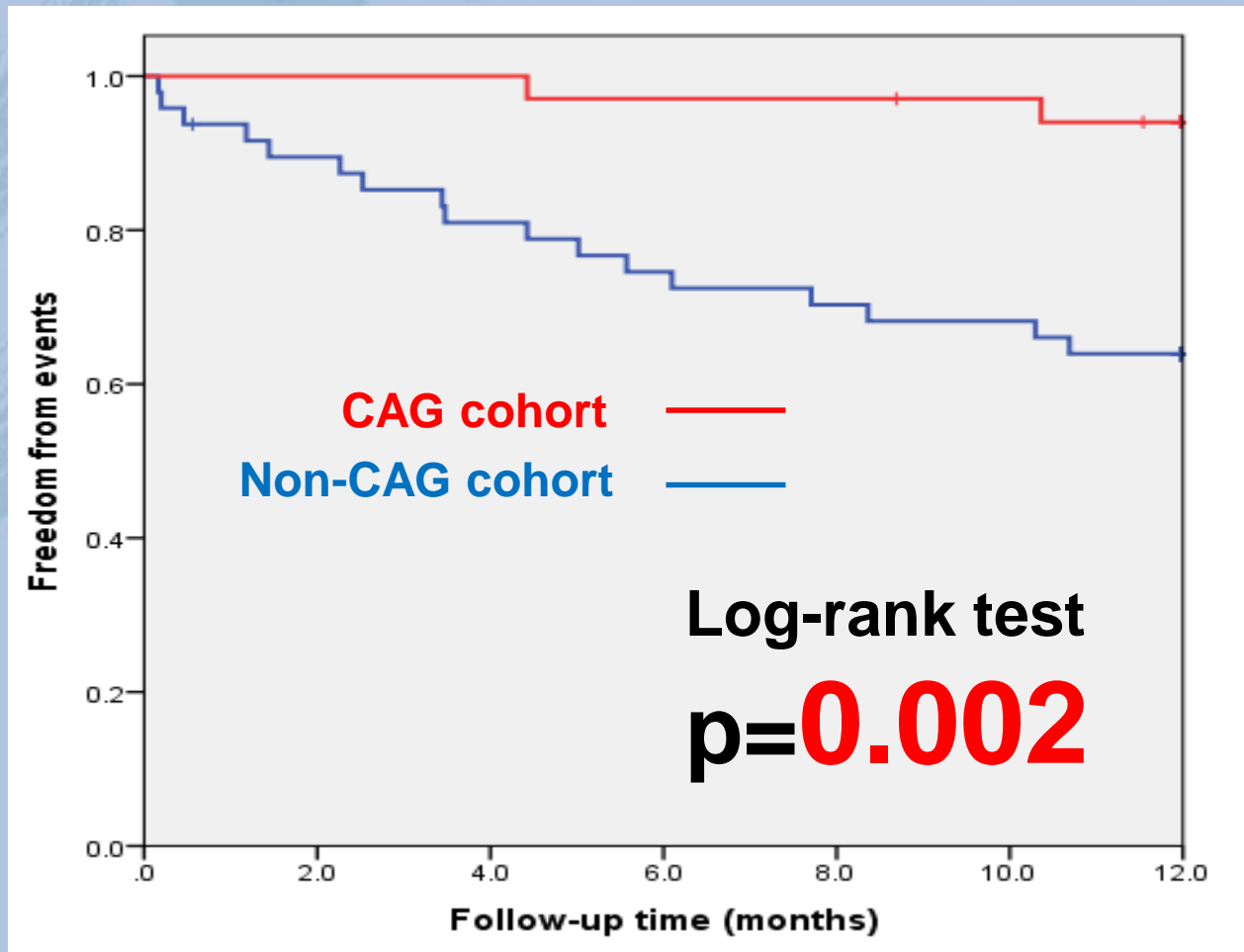
34 Pts

coronary revascularization

(PCI: **14**, CABG: **1**)

PCI: Percutaneous Coronary Intervention, CABG: Coronary Artery Bypass Graft surgery

All-cause of death, ACS, Re-admission due to HF



CAG	No. at risk	34	33	33	32
	%	100	97	94	94
Non-CAG	No. at risk	48	39	32	29
	%	100	79	68	64

Breakdown of Events

	CAG cohort (n=34)	Non-CAG cohort (n=48)	p value
<u>All-cause of death</u>	2 (5.9)	12 (25)	0.023
Cardiac death	1 (2.9)	4(8.3)	0.315
Non-cardiac death	1 (2.9)	8 (16.7)	0.050
Infection	0 (0)	2 (4.2)	
Cancer	1 (2.9)	3(6.3)	
other	0 (0)	3 (6.3)	
<u>ACS</u>	0(0)	4 (8.3)	0.084
<u>Re-admission due to HF</u>	0 (0)	1 (2.1)	0.397

ACS: Acute Coronary Syndrome, HF: Heart Failure

Values are presented as mean \pm standard deviation or n (%).

In **15** patients
received

coronary revascularization

(PCI:14, CABG:1)

✓ No Cardiac event.

✓ No Cardiac death.

Conclusion

- ✓ Routine **screening CAG** & **Adequate revascularization** may be **important** for the prognosis of **CLI patients.**

Thank you for your attention.

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