

症例の特徴

Table 2. Baseline Characteristics of the 291 Patients.*

Characteristic	Value
Age	年齢: 平均59歳(平均 52-66)
Male	性別: 男性74%
Race	
Black	18 (6)
Asian	66 (22.7)
BMI	BMI: 平均27
Hypertension	高血圧 66%
Diabetes	糖尿病 23%
Hyperlipidemia	高脂血症 60%
Smoking history	喫煙歴 60%
Family history of coronary artery disease	冠動脈疾患の家族歴 25%
History of myocardial infarction	心筋梗塞既往 20%
Previous percutaneous coronary intervention	経皮的冠動脈形成術既往 10%
Pacemaker	3
Implantable cardioverter-defibrillator	2
Previous congestive heart failure — no. (%)	34 (12)
NYHA class I	2
NYHA class II	25
NYHA class III	4
NYHA class IV	3
Previous cerebrovascular accident — no. (%)	10 (3)
Previous transient ischemic attack — no. (%)	3 (1)

Characteristic	Value
Angina at presentation — no. (%)	168 (58)
Class 0	6
Class 1	29
Class 2	103
Class 3	18
Class 4	12
Unstable angina at presentation — no. (%)	62 (21)
Agatston calcium score	
Median	80
冠動脈狭窄あり(QCA) 56%	
1 branch disease	27%
2 branch disease	21%
3 branch disease	8%
Median	59
Interquartile range	53–64
During scan acquisition	
Median	60
Interquartile range	54–65
Characteristics of MDCTA	
Contrast medium — ml	
Median	76
Interquartile range	73–80
Beta-blocker administered before scan — no. (%)	134 (46)
Nitroglycerin administered — no. (%)	263 (90)
Milliamperes	
Median	360
Interquartile range	270–400
Time from MDCTA to CCA — hr	
Median	10
Interquartile range	4–72
<24 hr — no. (%)	145 (50)
24–48 hr — no. (%)	54 (19)
>48 hr — no. (%)	92 (32)
Characteristic	Value
Characteristics of CCA	
Contrast medium — ml	
Median	100
Interquartile range	80–140
Nitroglycerin administered — no. (%)	267 (92)

結果

合併症及び経過

造影剤アレルギー 2例

死亡 1例

心筋梗塞 2例

一過性心虚血発作 1例

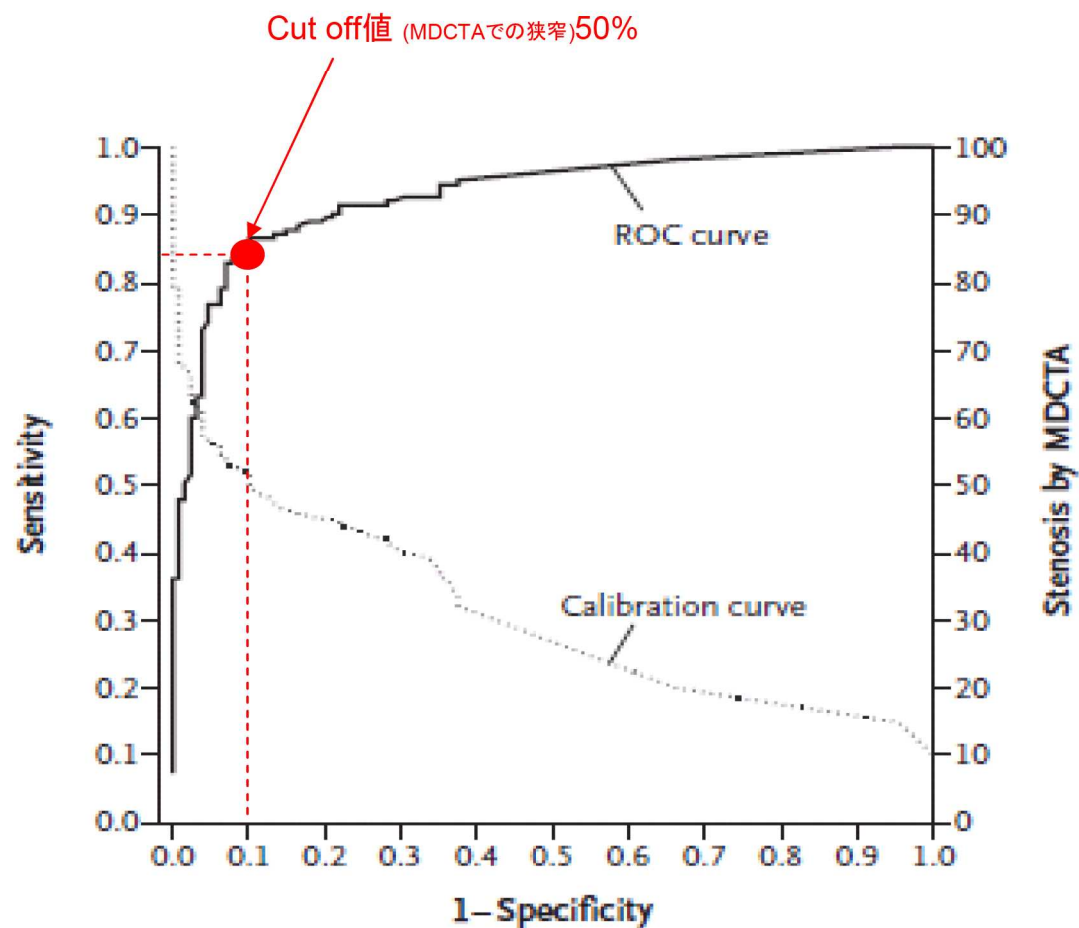
経皮的再還流療法施行 85例

外科的再還流療法 13例

MDCTA-Related Event	No. of Patients
Serious adverse event	
<u>Reaction to contrast dye†</u>	<u>2</u>
Renal failure	0
Cardiovascular event	
<u>Acute stent thrombosis resulting in myocardial infarction and congestive heart failure leading to death</u>	1
<u>Myocardial infarction</u>	<u>2</u>
After coronary-artery bypass grafting	1
After percutaneous coronary intervention	1
Transient ischemic attack after catheterization	1
Hospitalization for cardiovascular event	2
Unstable angina	1
Congestive heart failure	1
Hospitalization for other reason	3
Hematoma after catheterization	1
Pseudoaneurysm after catheterization	1
Thrombosis of vena femoralis	1
Procedure	
<u>Percutaneous coronary intervention</u>	<u>85</u>
<u>Coronary-artery bypass grafting</u>	<u>13</u>
Placement of implantable cardioverter–defibrillator or pacemaker	2
Noncardiac procedure	1

CCA(定量的評価)で50%以上の狭窄を認めた症例別 MDCTA診断精度

	Quantitative MDCTA (N=291)
AUC-平均(95%CI)	<u>0.93 (0.90-0.96)</u>
狭窄数(byCCA)	163
狭窄数(byMDCTA)	152
偽陽性数	13
偽陰性数	24
感度(95%CI)	<u>85 (79-90)</u>
特異度(95%CI)	<u>90 (83-94)</u>
陽性的中率(95%CI)	<u>91 (86-95)</u>
陰性的中率(95%CI)	<u>83 (75-89)</u>



その後の血行再建術の予測能力

AUC

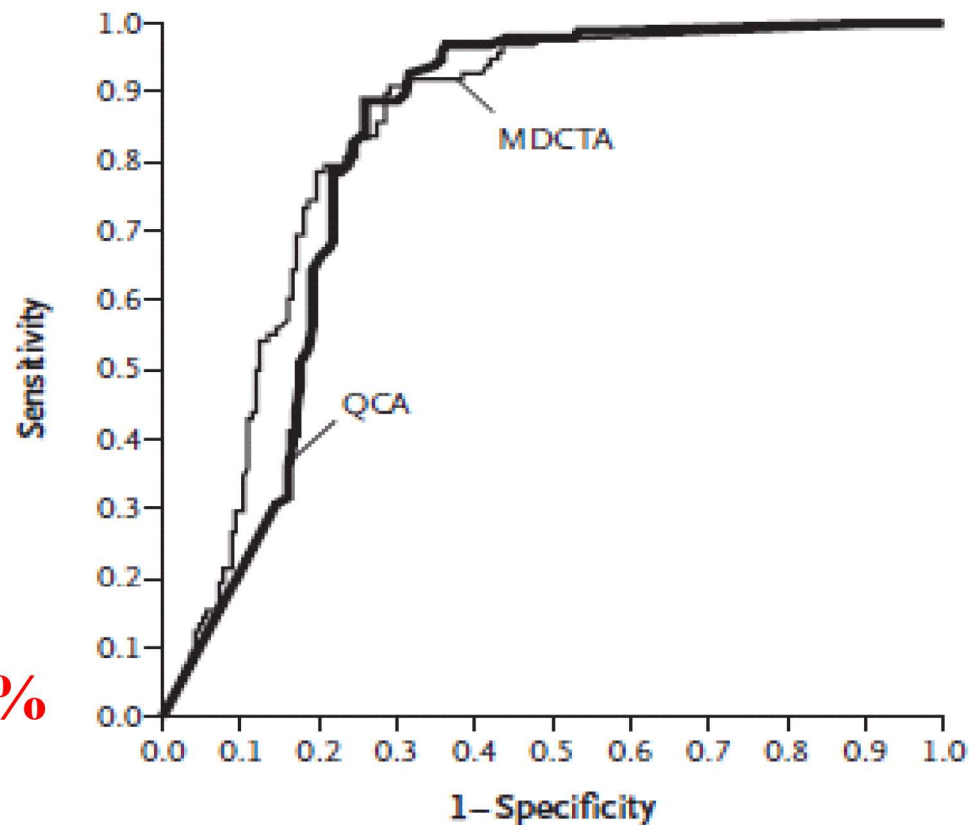
MDCTA: 0.84 (95% CI 0.79-0.88)

QCA : 0.82 (95% CI 0.77-0.86)

**AUCはMDCTAとQCAで
同等である**

感度:85%, 特異度:90%

陽性適中率:91%, 陰性適中率:83%



結論

マルチスライス CT 血管造影により、有症状患者における閉塞性冠動脈疾患の有無、その後の血行再建術の施行状況が正確に同定される。

しかし、陰性・陽性適中率からは、マルチスライス CT 血管造影は現段階では従来の血管造影の代替法とはなりえないことが示唆される。