مبتکران سلامت فاخر شماره ثبت : ۴۹۹۵۷۰

Anatomical and Physiological Assessment

Information

Name	Physician	Age
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Non-invasive Flow Assessment

Non-invasive assessment computed from coronary images is a novel method for determining the physiologic significance of coronary artery disease (CAD). Specificity was significantly higher with NiFFR compared with coronary images (85% vs 57%), with comparable sensitivity of 88% and 81%, NiFFR demonstrated higher discrimination of lesion-specific ischemia when compared with coronary images. The chance of major cardiac events (MACE) is low

Hemodynamic Parameters

Right Coronary Artery (RCA)	Left Circumflex (LCX)	Left Artery Descending (LAD)
		

MACE	Blood Flow	Dominant
low	Normal flow	right dominant
TAWSS condition	**TAWSS**	**ASCVD**
low	1.49	5.38
Syntax Score II	**Syntax Score I**	**Calcium Score**
		0
DAPT Condition	**DAPT Score**	**Mortality for PCI and CABG**
		year mortality of PCI and CABG is 4.51% and 3.82%, 4 respectively
FSS	**CMD**	**DAPT recommendtion**
low (<22)	is not seen	

Index of Micro-vascular Resistance (IMR)

IMR_RCA	IMR_LCX	IMR_LAD
27.44	23.65	23.65

Coronary Artery

NiFFR_RCA	NiFFR_LCX	NiFFR_LAD
(NiFFR = 0.90)	(NiFFR = 0.95)	(NiFFR = 0.90)

Angiography report

LM: patent
LAD: patent
Diagonal: patent
LCX: patent
OM: patent
RCA: patent
PDA: patent
PLV: patent

Discussion

Dominant
Coronary circulation with **conventional anatomy is right dominant**

TAWSS
Time average wall shear stress for coronary is **low** (TAWSS = 1.49Pa).

Calcium Score
Calcium score **(CAC = 0)**, the chance of major cardiac events (MACE) is 5.38%. (low risk)

Micro-vascular Resistance
Index of Micro-vascular Resistance (IMR) for LAD, RCA and LCX are 23.65U, 27.44U and 23.65U, respectively, therefore coronary micro-vascular disease (CMD) **is not seen** in the patient (< 30U)

Time Average Wall Shear Stress
High TAWSS (> 8 Pa) causes the rupture of fatty plaques and low TAWSS increases atherosclerosis. TAWSS value is 1.49Pa (< 1.0 Pa). Therefore, blood flow is laminar in coronary artery

Functional Syntax Score
Functional syntax score (FSS) is , 4 year mortality of PCI and CABG is 4.51% and 3.82%, respectively
Therefore Medical treatment under observation recommended, if the patient is asymptomatic

Physiologic Assessment

Recommendation

Medical treatment under observation recommended, if the patient is asymptomatic

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