CORRECTIONS

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Figure 11 in "Echocardiographic insights into regional flow-function relationships in coronary artery disease" (Kaul S. J Nucl Cardiol 2005;12:216-26) was printed upside down. The corrected figure is reprinted below.



Figure 11. Data from a dog with a noncritical LAD stenosis at peak dobutamine dose, where MBF is increased. *Left panels*, Perfusion defects (*arrows*) early (*upper panel*) and late (*lower panel*) after microbubble destruction. The first shows the perfusion territory of the artery, and the second shows how much of it is filled with collaterals. *Right panels*, The *upper panel* shows the radiolabeled microsphere–derived hypoperfused zone (*arrows*), whereas the *lower panel* shows the extent of abnormal WT (defined by *chords* and *arrows*). Note the similarities between the MCE and microsphere data in the *upper panels* and the MCE and WT data in the *lower panels*. (Reprinted from reference 36 with permission.)

CORRECTION

The tables in "Targeting the vulnerable plaque: The evolving role of nuclear imaging" (J Nucl Cardiol 2005;12:234-46) were printed incorrectly. The corrected tables are as follows.

Imaging modality	% Stenosis	Wall	Lipid	Fibrous cap	Thrombus	Macrophage/ inflammation	Ca ²⁺	Apoptosis
Invasive								
X-ray angiography	*†‡§	_	_	_	(*)	_	*†‡§	_
IVUS	*†‡§	*†‡§	(* ^{†‡§})	(* ^{†‡§})	(* ^{†‡§})	_	*†‡§	_
OCT	*	*	*	*	*	_	*	_
Thermography	_	_	_	_	_	*	_	_
Noninvasive								
US	† ‡ §	†‡§	_	_	_	_	†‡§	_
MRI	(*) ^{†‡§}	*†‡§	+	+	†‡§	(†)	(*) ^{†‡§}	_
EBCT	_	_	_	_	_		*†‡§	_
MSCT	(*) ^{†‡§}	*†‡§	†‡§	+	_	_	*† ‡ §	_
Nuclear	_	—	†§	—	†§	+‡	_	+

Table 1. Imaging modalities used for assessment of human atherosclerotic plaque

Parentheses indicate that imaging is less than satisfactory.

IVUS, intravascular ultrasound; *OCT*, optical coherence tomography; *US*, ultrasound; *MRI*, magnetic resonance imaging; *EBCT*, electron beam computed tomography; *MSCT*, multi-slice computed tomography.

*Coronary. [†]Carotid. [‡]Aorta. [§]lleo-femoral.

Target cell/

Target

o image atherosclerosis						
Animal/ human	Ex-vivo histologic correlation	Successful in-vivo imaging	Notes			
uman carotid	1	1	Long plasma half-life			

Table 2. Radionuclide tracer compounds used to image atherosclerosis

mechanism	molecule	Tracer	human	correlation	imaging	Notes
Lipid accumulation	LDL	123-I LDL ³⁵	Human carotid	✓	1	Long plasma half-life of tracer necessitates late imaging
		99m-Tc LDL ³⁷	Human carotid, ileo-femoral	~	?	Tracer uptake seen in only 4 of 17 patients, but good histologic correlation found between uptake and plaque instability
		125-I LDL ³⁶	NZW rabbit aorta	1	N/A	Good correlation with foam cell infiltration
	Ox-LDL	99m-Tc ox- LDL ³⁸	Human carotid	1	1	Rapid plasma clearance (c.f. native LDL tracers)
		125-I MDA2 ³⁹	Apo E -/- mouse WHHL rabbit	1	N/A	Also capable of tracking changes in foam cell number ⁴⁰
		125-I IK17 ⁴²	ApoE -/- mouse	1	N/A	In-vitro staining of human plaques, IK17 localizes to lipid core ⁴²
	ароВ	125-I SP-4 ⁴³	NZW rabbit aorta	\checkmark	N/A	Colocalization of with foam cells
		123-I SP-4 ⁴⁴	WHHL rabbit aorta	N/A	1	
Macrophage infiltration	Autologous monocytes	111-In monocyte ⁴⁶	Human	N/A	1	ldentified 40% of lesions, no histologic correlation
	CCR-2	125-I MCP- 1 ⁵¹	NZW rabbit aorta	1	N/A	Excellent correlation with macrophage number, fast plasma clearance
	Ama	131-I Ama- MoAb ⁵²	WHHL rabbit aorta	1	Х	Slow plasma clearance, unsuccessful gamma imaging
	GLUT	18-F FDG ^{65,67–70}	WHHL + NZW aorta Human carotid and aorta	<i>ب</i>	1	PET tracer, good correlation between tracer uptake and macrophage number, uptake in humans unstable > stable plaque

Target mechanism	Target cell/ molecule	Tracer	Animal/ human	Ex-vivo histologic correlation	Successful in-vivo imaging	Notes
	ММР	123-I HO-CCS 27023A ⁵⁵	apoE -/- mouse carotid	1	J	Significant increase in uptake in lesioned carotid (c.f. sham and control), rapid plasma clearance
Apoptosis	PS	99m-Tc Annexin- V ^{73,74}	NZW rabbit aorta Human carotid	J	J	Colocalisation with apoptotic macrophages, uptake in humans correlates with vulnerable histologic features
Coagulation	Fibrin	99m-Tc T2G1s Fab' ⁷⁶	Canine carotid	N/A	1	Uptake ratio lesion: control = 2:1 in vivo and 4:1 ex vivo
	D-dimer	99m-Tc TRF1 ⁸⁰	Human carotid	N/A	х	Uptake seen in only 5 of 8 patients, no histologic correlate
Platelets	Autologous platelets	1 1 1-In autologous platelets ^{83,84}	Human carotid	N/A	?	Inconsistent results between studies, may be of use in tracking effects of antiplatelets ^{81,82}
	GPIIb/IIIa	99m-Tc P748 ⁸⁶	Canine carotid	N/A	1	·
		99m-Tc P280 ⁸⁷	Human carotid	N/A	?	Uptake in 11 of 18 patients, noo histologic correlate
		99m-Tc DMP- 444 ⁸⁸	Canine carotid	1	1	Tracer uptake correlated with platelet number/ thrombus weight

Table 2. Continued

LDL, Low density lipoprotein; *ox-LDL*, oxidized low density lipoprotein; *NZW*, New Zealand white; *N/A*, not attempted; *Apo E -/-*, apolipoprotein E null; *MDA*, molondialdehyde; *WHHL*, Watanabe heritable hyperlipidaemic; *SP*, synthetic peptide; *CCR*, chemokine receptor; *MCP*, monocyte chemotactic protein; Ama-*MoAb*, amino malonic acid monoclonal antibody; [¹⁸F]FDG, 18-flurodeoxyglucose; *GLUT*, glucose transporter protein; *MMP*, matrix metalloproteinase; *PS*, phosphatadyl serine.