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Leukocytes and complement in atherosclerosis

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Citation

Alipour, A. (2012, February 9). *Leukocytes and complement in atherosclerosis*. Retrieved from <https://hdl.handle.net/1887/18459>

Version: Corrected Publisher's Version

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APPENDIX

List of abbreviations
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LIST OF ABBREVIATIONS

ANOVA	analysis of variance
AP	angina pectoris
Apo (AI, B, B48, B100)	apolipoprotein
ASP	acylation stimulating protein
ATRLs	artificial TRLs
au	arbitrary units
BMI	body mass index
C3	complement component 3
CAD	coronary artery disease
CCA	common carotid artery
CD11b/ CD66b	cluster of differentiation (designation)
CR1	complement Receptor 1
CRP	C-reactive protein
CVD	cardiovascular disease
(d)AUC	(incremental) area under the curve
DNA	deoxyribonucleic acid
DMTU	dimethylthiourea
ECD	PE-Texas Red
FACS	fluorescence-activated cell sorter
FCH	familial combined hyperlipidemia
FFA	free fatty acid
FH	familial hypercholesterolemia
FITC	fluorescein isothiocyanate
fMLP	N-formylmethionyl-leucyl-phenylalanine
GC	gas chromatography
GPIHBP1	glycosylphosphatidylinositol- anchored high- density lipoprotein- binding protein 1
HBA	hydroxybutyric acid
HDL	high density lipoproteins
HOMA	homeostatic model assessment
IC	immune complexes
IMT	intima-media thickness
LDL	low density lipoproteins
LDL-R	LDL-receptor
LPL	lipoprotein lipase
MASPs	MBL-associated serine proteases
MBL	mannose binding lectin

MFI	mean fluorescence intensity
MoAbs	monoclonal antibodies
MOD	minimum obstruction diameter
MPO	myeloperoxidase
mRNA	messenger Ribonucleic Acid
MSD	mean segment diameter
MSR1	macrophage scavenger receptor 1
NKX2-3	NK2 transcription factor related
NTRLs	native TRLs
OFLT	oral fat loading test
OGTT	oral glucose tolerance test
OR	odds ratio
PCR	polymerase chain reaction
PE	phycoerythrin
REGRESS	Regression Growth Evaluation Statin Study
ROS	reactive oxygen species
Sf	Svedberg flotation rate
SNP	single-nucleotide polymorphism
T2DM	type 2 diabetes mellitus
TG	triglycerides
TRLs	TG-rich lipoproteins
VLDL	very low density lipoproteins

PUBLICATIONS

Peer-reviewed papers:

Alipour A, Valdivielso P, Elte JWF, Janssen JW, Rioja J, van der Meulen N, van Mechelen R, Njo TL, Gonzalez-Santos P, Rietveld AP, Castro Cabezas M. Exploring the value of apoB48 as marker for atherosclerosis in clinical practice. *Eur J Clin Invest*. 2011; in press.

Bovenberg SA, Klop B, **Alipour A**, Martinez-Hervas S, Westzaan A, van de Geijn GJ, Janssen HW, Njo T, Birnie E, van Mechelen R, Rietveld AP, Elte JWF, Castro Cabezas M. Erythrocyte-associated apolipoprotein B and its relationship with clinical and subclinical atherosclerosis. *Eur J Clin Invest*. 2011; in press.

Alipour A, Castro Cabezas M, Elte JWF, Vallvé JC, Ribalta J, Zwinderman AH, Defesche JC, Jukema JW. Mannose binding lectin 2 haplotypes do not affect the progression of coronary atherosclerosis in men with proven coronary artery disease treated with pravastatin. *Atherosclerosis*. 2011;215:125-129.

Bovenberg SA, **Alipour A**, Elte JW, Rietveld AP, Janssen JW, van de Geijn GJ, Njo TN, van Mechelen R, Hervas SM, Castro Cabezas M. Cell-mediated lipoprotein transport: A novel anti-atherogenic concept. *Atheroscler Suppl*. 2010;11:25-29.

Alipour A, van Oostrom AJHMM, Van Wijk JP, Verseyden C, Plokker HW, Jukema JW, Rabelink AJ, Castro Cabezas M. Mannose binding lectin deficiency and triglyceride-rich lipoprotein metabolism in normolipidemic subjects. *Atherosclerosis*. 2009;206:444-450.

Van Oostrom AJHMM, **Alipour A**, Sijmonsma TP, Verseyden C, Dallinga-Thie GM, Plokker HW, Castro Cabezas M. Comparison of different methods to investigate postprandial lipaemia. *Neth J Med*. 2009;67:13-20.

Alipour A, Elte JWF, van Zaanen HCT, Rietveld AP, Castro Cabezas M. Novel aspects of postprandial lipemia in relation to atherosclerosis. *Atheroscler supp*. 2008;9:39-44.

Alipour A, van Oostrom AJHMM, Izraeljan A, Collins J, Frayn KN, Elte JWF, Castro Cabezas M. Leukocyte activation by triglyceride-rich lipoproteins. *Arterioscler Thromb Vasc Biol*. 2008;28:792-797.

Alipour A, Elte JWF, van Zaanen HCT, Rietveld AP, Castro Cabezas M. Postprandial inflammation and endothelial dysfunction. *Biochem Soc Trans*. 2007;35(Pt 3):466-469.

Van Oostrom AJHHM, **Alipour A**, Plokker HWM, Sniderman AD, Castro Cabezas M. The metabolic syndrome in relation to complement component 3 and postprandial lipemia in patients from an outpatient lipid clinic and healthy volunteers. *Atherosclerosis*. 2007;190:167-173.

Oral presentations:

Alipour A, van Oostrom AJHHM, Van Wijk JPH, Verseyden C, Plokker HWM, Jukema JW, Rabelink AJ, Castro Cabezas M. Dissociation of postprandial clearance of chylomicrons and VLDL1 in MBL deficiency; role of the innate immune system in postprandial lipemia? International Symposium on chylomicrons in Disease (ISCD) 2008 (Lake Louise, Canada). Best overall abstract.

Alipour A, van Oostrom AJHHM, Van Wijk JPH, Verseyden C, Plokker HWM, Jukema JW, Rabelink AJ, Castro Cabezas M. Deficiency of mannose binding lectin is associated to impaired metabolism of VLDL1 particles despite normal fasting plasma triglycerides. *Circulation suppl*. 2007;1098 (Orlando, USA).

Alipour A, van Oostrom AJHHM, Izraeljan A, Collins J, Frayn K, Njo TL, van Mechelen R, Elte JWF, Castro Cabezas M. Triglyceride-mediated Leukocyte Activation as a potential Mechanism for Postprandial Atherosclerosis. *Circulation suppl*. 2006;1741 (Chicago, USA).

Alipour A, van Oostrom AJHHM, Izraeljan A, Collins J, Frayn K, Elte JWF, Castro Cabezas M. Postprandial leukocyte activation: a possible mechanism for atherosclerosis and inflammation by triglyceride-rich lipoproteins. *Atheroscler suppl*. 2006;7:P31 (Rome, Italy).

Alipour A, van Oostrom AJHHM, Castro Cabezas M. Increased expression of activation markers on monocytes and neutrophils in type 2 diabetes. Nederlandse Vereniging voor Diabetes Onderzoek (NVDO), Wetenschappelijke najaarsvergadering 2003 (Amsterdam, Nederland).

Poster presentations:

Alipour A, Valdivielso P, Elte JWF, Janssen JW, Rioja J, Njo TL, González-Santos P, Rietveld AP, Castro Cabezas M. ApoB48 as a marker of atherosclerosis in patients with familial lipid disorders, type 2 diabetes mellitus and coronary artery disease. *Circulation suppl*. 2010;122:A19159 (Chicago, USA).

Castro Cabezas M, **Alipour A**, Verseyden C, Salazar J, Masana L, Ribalta J. MTP-493G/T gene polymorphism and postprandial lipemia in familial combined hyperlipidemia: effects of treatment with atorvastatin. *Atheroscler suppl*. 2008;9:P40 (Istanbul, Turkey).

Alipour A, de Vries W, van Mechelen R, Njo TL, Janssen JW, Elte JWF, Castro Cabezas M. Lack of intravascular regional differences in inflammation between subjects with and without coronary artery disease. *Atheroscler supp.* 2008;9:P46 (Istanbul, Turkey).

Alipour A, de Vries W, Njo TL, Janssen JW, van Mechelen R, Elte JWF, Castro Cabezas M. Increased fasting and postprandial leukocyte activation in longstanding diabetes compared to newly-onset. *Atheroscler supp.* 2007;8:P83 (Helsinki, Finland).

Van Oostrom AJHHM, **Alipour A**, Sijmonsma TP, Verseyden C, Dallinga-Thie GM, Ploker HWM, Castro Cabezas M. Comparison of different methods to study postprandial lipemia and effects of rosuvastatin in patients with insulin resistance and premature coronary sclerosis. *Atheroscler supp.* 2007;8:P207 (Helsinki, Finland).

Goudriaan N, **Alipour A**, Njo TL, van Mechelen R, Castro Cabezas M, Janssen JW. Mannose binding lectin serum levels and genotype are not associated with significant coronary sclerosis in Dutch patients. *Atheroscler supp.* 2006;7:P235 (Rome, Italy).

Book Chapter:

Alipour A, Coll B, Rietveld AP, Marsillach J, Camps J, Joven J, Elte JWF, Castro Cabezas M. Paraxonase 1 and postprandial lipemia. In: Mackness B, Mackness M, Aviram M, Paragh G. Proteins and cell regulation, Volume 6: The Paraxonases: their role in disease development and Xenobiotic metabolism. The Springer-Verlag, 2008. ISBN 978-1-4020-6560-6.

CURRICULUM VITAE

The author was born on July 19th, 1978 in Babolsar, Iran. At the age of 12, his life in the Netherlands started with a year of 'International Switching Class'. He continued secondary school by getting his diplomas in three consecutive levels of secondary school, MAVO, HAVO (Scholengemeenschap Brabant, Den Bosch) and VWO (Durendael, Oisterwijk), eventually graduating in 1998. Then he started medical school at the university of Utrecht. As a medical student he spent 6 months at the Vascular Laboratory of the University Medical Center Utrecht (dr. M. Castro Cabezas and prof. dr. T.J. Rabelink), where he investigated the role of postprandial hyperlipidemia in leukocyte activation.

After obtaining his medical degree in 2005, he started the research described in this thesis at the department of Internal Medicine, Center for Diabetes and Vascular Medicine at the Sint Franciscus Gasthuis in Rotterdam under supervision of dr. M. Castro Cabezas and dr. J.W.F. Elte, in collaboration with the department of Cardiology of Leiden University Medical Center (prof. dr. J.W. Jukema). Part of the research was performed in 'Unitat de Recerca de Lípids i Arteriosclerosi', faculty of Medicine at the University of Rovira i Virgili in Reus, Spain (dr. J. Ribalta, Prof. dr. L. Masana).

Before starting his specialty training in Cardiology at the Sint Antonius Hospital Nieuwegein (dr. W. Jaarsma and dr. J.M. ten Berg), he fulfilled his 2 years (2009-2011) of Internal Medicine (dr. A.B.M. Geers and dr. W.J.W. Bos) at the same center and one year of Cardiology training at the Gelre Hospital Apeldoorn (dr. B.E. Groenemeijer and dr. R.A. Waalewijn). Arash is married to Josine Luijten and they have two sons, Noah and Timo.

