

Plasma Protein Polymorphism in HIV-Seropositive Patients: GC- and TF*C-Subtypes and PI-System

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INTRODUCTION

Blood samples were taken from 279 patients of the Institute of Blood Coagulation and Transfusion Medicine at the Heinrich-Heine-University. The series includes individuals only HIV-seropositive, patients with ARC (AIDS related complex), AIDS and Kaposi-sarcoma. Typing was carried out in laboratory routine use.

RESULTS & DISCUSSION

In the GC system we found the distribution shown in tab.1. Comparing the findings with two control studies (tab.2) there are no significant differences between the gene frequencies (calculated by gene counting). In the TF*C system we arrived at a similar conclusion. The distribution of the phenotypes in HIV-seropositive probands (tab.3) is comparable to those found in obviously healthy persons (tab.4).

In our pilote study (1,4,5,6) we found an unusual distribution in the PI system. The now available results do not confirm those findings. Though there are still differences between the observed and the expected values (tab.5) - especially concerning the M2 allele -, the gene frequencies are comparable to those found in other studies of PI distribution in North Rhine-Westphalia (tab.6).

At last we come to the conclusion that there is no association between the examined haemogenetic systems and HIV-infection.

TAB.1 GC-SUBTYPES IN HIV-SEROPOSITIVE PATIENTS

Phenotype	observed		expected	
	n	%	n	%
1S	107	38.35	101.76	36.47
1F1S	43	15.42	48.90	17.53
1F	7	2.51	5.88	2.11
2-1F	24	8.60	20.31	7.28
2	18	6.45	17.56	6.29
2-1S	80	28.67	84.55	30.31
total	279	100	279	100

TAB.2 OTHER STUDIES ON GC-POLYMORPHISM IN NORTH RHINE-WESTPHALIA

Country	GC*1S	GC*1F	GC*2	n	Ref.
Lower Rhine region	0.5649	0.1489	0.2824	262	(7)
Düsseldorf region	0.5471	0.1564	0.2960	1157	(7,8)
This study	0.6039	0.1452	0.2509	279	

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TAB.3 TF*C-SUBTYPES IN HIV-SEROPOSITIVE PATIENTS

Phenotype	observed		expected	
	n	%	n	%
c1	162	59.56	163.68	60.18
c2c1	73	26.84	70.59	25.95
c2	6	2.21	7.61	2.80
c3c1	25	9.19	24.05	8.84
c3	0	0	0.88	0.32
c3c2	6	2.20	5.19	1.91
total	272	100	272	100

TAB.4 OTHER STUDIES ON TF*C-POLYMORPHISM IN NORTH RHINE-WESTPHALIA

Country	c1	c2	c3	n	Ref.
Lower Rhine region	0.8111	0.1431	0.0401	262	(7)
Düsseldorf region	0.7816	0.1355	0.0711	380	(2,7)
This study	0.7757	0.1673	0.0570	272	

TAB.5 PI-PHENOTYPES IN HIV-SEROPOSITIVE PATIENTS

Phenotype	observed		expected	
	n	%	n	%
M1	153	54.84	149.89	53.72
M2M1	54	19.35	63.77	22.86
M2	13	4.66	6.78	2.43
M3M1	41	14.69	37.38	13.39
M3	2	0.72	2.33	0.84
M3M2	6	2.15	7.95	2.85
M1Var	8	2.87	8.06	2.89
M2Var	1	0.36	1.72	0.62
M3Var	0	0	1.01	0.36
Var	1	0.36	0.11	0.04
total	279	100	279	100

TAB.6 OTHER STUDIES ON PI-POLYMORPHISM IN NORTH RHINE-WESTPHALIA

Country	M1	M2	M3	Var	n	Ref.
Düsseldorf region	0.7468	0.1500	0.0906	0.0125	160	(1,4)
This study	0.7329	0.1559	0.0913	0.0197	279	

Var includes PI*S and PI*Z

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