PROTHROMBOTIC COAGULATION FACTORS (PTCF) IN SYMPTOMATIC NEONATAL CEREBRAL INFARCTION (SNCI). WHAT IS THEIR ROLE?

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Background: PtCFs have been associated with SNCI, but their relative risks is still unknown.

Objective: To examine the extent to which single and combined PtCF influence the onset of SNCI.

Methods: Prospective multicenter case-control study. Factor V (FV) G1691A mutation; Prothrombin (PT) G20210A variant; MTHFR T677T genotype; Antithrombin III (AT); Protein C; Protein S; Lipoprotein (Lp-a); Homocystein and anticardiolipin antibodies were investigated in 29 infant-mother pairs with SNCI and in 28 infant-mother control pairs.

Results: Eight of 29 patients (28%) had at least 1 PtCF compared with 9/28(33%) controls. PtCF were found in 17(58%) mothers of infants with infarction and in 9(36%) of mothers of healthy infants (OR 2,1, 95%CI 0,7-6,4). At least 2 factors were found in 2 neonates; one SNIC patient and one healthy control. Two mothers of a SNIC patient and a control, respectively, had at least 2 factors.

	Neonates		Р	Mothe	Mothers	
	Cerebral infarction	Control		Cerebral infarction	Control	
FV	3(10%)	1(4%)	NS	2(8%)	0(0%)	NS
PT	2(7%)	0(0%)	NS	2(8%)	1(4%)	NS
MTHFR homozygosis	1(5%)	2(10%)	NS	2(20%)	1(4%)	NS
AT	0	0	-	0	0	-
Prot C deficiency	0	0	-	0	0	-
Prot S deficiency	1(4%)	1(4%)	NS	0	1(4%)	NS
Lpa>30	2(8%)	0(0%)		5(29%)	6(25%)	NS
Homocystein >12	0(0%)	2(7%)	NS	3(18%)	1(4%)	NS
Anticardiolipin Abs	0	0	NS	3	0	NS

Conclusion: Our data indicate that PtCF do not appear to play a major role in SNCI.