

## P-485 - ASSOCIATION BETWEEN VASCULAR ENDOTHELIAL GROWTH FACTOR -2578C/A POLYMORPHISM AND DEPRESSIVE SYMPTOMS

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**Background:** VEGF exerts diverse effects on the cardiovascular system. VEGF and its receptors are also expressed in the central nervous system. Moreover, accumulating data suggest that VEGF is involved in the etiopathogenesis of depression. To date, the association of the -2578 C/A SNP with depression has been investigated only by two research groups but their results are conflicting.

**Aims:** In the present study we tried to assess the potential association of the -2578 C/A polymorphism with mood disorders (MDD and BD).

**Methods:** 220 patients (MDD: 140; BP: 80) with a current episode of major depression (MDE) were recruited at our department. HADS was used for the assessment of the severity of depressive symptoms. Control subjects without psychiatric history were also enrolled (n=410). VEGF -2578 C/A SNP was analyzed with quantitative PCR.

**Results:** We found *no significant differences* in *allele frequencies* between cases and controls (neither in the comparison of whole patient sample vs. controls nor in comparisons of patients with MDD or BP vs. controls). Nevertheless, depression scores of patients with MDD who carry the C allele were significantly higher (p=0.012).

**Conclusion:** Our preliminary results suggest that presence of the C allele might predispose to a more severe MDE in patients with MDD. This is in partial agreement with the results of Viiki et al. who found that the CC genotype was more frequent among patients with MDD than in control subjects and also associated with treatment resistant depression.

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