

P-479 - VISUAL CONTRAST SENSITIVITY IN DEPRESSION

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Background: The search for a reliable biological marker in depression is on-going. Visual contrast sensitivity has recently been reported to be lower in depressed patients compared to healthy controls. We aim to examine the consistency of this finding and to explore the underlying retinal electrophysiology.

Methods: Pattern electroretinogram and subjective visual contrast test were used to assess visual contrast sensitivity in 20 subjects with major depressive disorder and 20 healthy controls. Full-field electroretinography assessed the general neurophysiology of retinal function. Depression was diagnosed based on DSM-IV criteria and depression severity was measured by MADRS and BDI.

Results: Visual contrast sensitivity was significantly lower in depressed patients than controls based on Landolt C visual contrast test [Weber 2.25 ± 1.84 (SD) vs. 1.20 ± 0.64 (SD); $p=0.02$]. No difference was found between the groups using PERG. Greater severity of depressive symptoms correlated with poorer visual contrast sensitivity ($r=0.49$, $p=0.001$).

Conclusion: Although depressed subjects clearly had reduced visual contrast sensitivity, this was not consistently demonstrated using PERG. The neurobiological link between major depressive disorder and visual contrast sensitivity requires further investigation.