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Abcb1 Haplotype (1236tt-2677tt-3435tt) and Use of Violent Suicide Methods Among Attempters.

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Introduction: Those suicide attempters that choose violent methods dramatically diminish the possibility of survival. Completed suicide using violent means, which appears common among first-time suicide attempters, was recently found to be more likely among T allele carriers in the three most common *ABCB1* SNPs, encoding for P-qp.

Objectives and aims: This study examined, for the first time, whether the *ABCB1* (C1236T, G2677T/A, C3435T) SNPs were associated with the use of violent means among survivors of a suicide attempt. Methods: Suicide attempters (n=578, 87.4% women; of whom 16.6% committed a violent intent) were genotyped for *ABCB1* C1236T, G2677T/A, C3435T. The relations of the three genotypes and of the TTT haplotype with the use of a violent suicide method were evaluated separately. The impact of confounds on these variables was controlled.

Results: A higher frequency (p=0.02) of suicide attempters using violent methods was found among those carrying the *ABCB1* haplotype (1236TT-2677TT-3435TT). Since gender and number of previous suicide attempts were identified as confounds, the relation was tested in the subset of women who were first-time attempters or second- and more-time attempters. The ABCB1 haplotype increased the risk more than three times

in those women attempting a violent suicide for the first time (OR=3.6; CI95%:1.08-12.09; p=0.04). Discussion: The *ABCB1* haplotype (1236TT-2677TT-3435TT) was related to the use of a violent suicide attempt method. Genotyping for these three *ABCB1* SNPs may be helpful to detect people at risk of first suicide intents using violent methods.

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