CHOLESTEROL AND THE CYCLE OF VIOLENCE IN SUICIDE ATTEMPTERS

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Background: An association between low levels of serum cholesterol and violent or suicidal behaviour has frequently been reported. However the role of serum cholesterol in the cycle of violence (Widom 1989) has not been studied. The aim of this study was to investigate association between exposure to violence during childhood and expressed violent behaviour in suicide attempters with low and high serum cholesterol levels.

Method: A total of 81 suicide attempters were assessed with the Karolinska Interpersonal Violence Scale (KIVS) measuring exposure to violence and expressed violent behaviour in childhood (between 6-14 years of age) and during adult life (15 years or older). We used median split to dichotomise groups below and above median serum cholesterol.

Results: In patients with serum cholesterol below median, the correlation between exposure to violence as a child and violent behaviour as an adult was significant (rho=0.52, p=0.0024), while in patients with serum cholesterol above median, the correlation between exposure to violence as a child and expressed violent behaviour as an adult was not significant (rho=0.23, p=0.23).Comorbid substance abuse predicted violent behaviour as an adult only in patients with serum cholesterol above median.

Conclusion: Cycle of violence hypothesis is modified by serum cholesterol.