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ASSOCIATION BETWEEN ALBUMIN AND SOCIAL COGNITION IN ATTENTION-DEFICIT-HYPERACTIVITY-DISORDER (ADHD)

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**Introduction:** Albumin is a protein which serves as a transporter for a variety of metabolites and as a storage for a lot of substances. Although albumin cannot pass the blood-brain-barrier and thus influence the CNS directly, a negative relation between cognitive impairment and serum albumin level has been observed in studies of normal and pathological aging. The aim of the present study was to investigate the association between albumin and social cognition in ADHD.

**Method:** 20 adult patients with ADHD and 20 healthy controls participated in a double-blind within subjects crossover study. Participants completed the Moral-Judgment-Test, Tuebingen Affect Battery, the Movie for the Assessment of Social Cognition (MASC) and Cambridge Behaviour Scale (EQ). In addition, ADHD symptoms were assessed by the Wender Utah Rating Scale (WURS-K) and ADHD Self Rating Scale. Serum albumin levels were determined after blood withdrawal.

**Results:** In the patient group serum albumin levels were negatively associated with ADHD pathology measured by WURS-K. In addition, a low level of albumin was related with poorer performance in theory of mind, moral judgment competence and affective prosody tasks.

**Conclusions:** The results suggest that albumin is related to social cognition in younger patients with ADHD. This is, to the knowledge of the authors, the first investigation, in which the association between albumin and cognition has been investigated in ADHD. Thus the findings of the present study need replication and the neural mechanisms have to be explored in future studies. Further studies are needed to exclude a possible medication effect.