

## CORTISOL AWAKENING RESPONSE (CAR) IN ADULTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

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**Introduction:** ADHD in adults is associated with a significant impairment in many life activities increasing the risk of chronic stress in everyday life. Previous studies reported normal cortisol awakening response (CAR) in children with ADHD without comorbidities, nevertheless there is a lack of studies in adults.

The aim of the present research is to examine CAR in adults with ADHD and to assess possible differences between the combine and inattentive subtypes.

**Methodology:** Patients were recruited from the Program for adults with ADHD in the Department of Psychiatry of the Hospital Universitari Vall d'Hebron. The clinical sample consisted of 50 adults, age between 18 and 51 years (mean  $35.24 \pm 9.21$ ) fulfilling current diagnostic criteria for ADHD (DSM-IV criteria). All patients were naïve to stimulant medication. Psychiatric and organic comorbid disorders were excluded. To assess CAR, four salivary cortisol samples were collected at 0, 30, 45 and 60 minutes after awakening.

**Results:** The mean increase in CAR for the whole group of patients was  $10.34 \pm 8.79$  nmols/l. T-test comparisons showed no significant differences in the mean increase of CAR between the inattentive (mean:  $9.47 \pm 9.04$  nmols/l) and combine (mean:  $11.25 \pm 8.67$  nmols/l) subtypes ( $t=0.610$ ;  $z=0.546$ ).

**Conclusion:** Despite there were no significant differences in salivary CAR between ADHD subtypes in adults, the mean increase of CAR was higher in combine than in the inattentive subtype. Salivary CAR needs to be further explored as an index of vulnerability to stress in these patients.