

## Abuse/craving:

### – basic

#### PERSONALITY AND DOPAMINERGIC FUNCTION: ARE THERE CORRELATIONS IN ALCOHOLDEPENDENT MEN?

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This work is a biological approach to personality of alcoholdependent men. Since dopamine is the main transmitter within the addiction-involved "reward system" and since dopaminergic activity is associated with human behavior like "level of initiative", "explorative curiosity" or "novelty seeking" we decided to investigate the relationship between the individual dopaminergic functional level and habitual personality traits.

By using the "drug challenge paradigm" we studied the sensitivity of dopaminergic receptors in vivo. We used apomorphine, which is a dopamine receptor agonist, to stimulate the pituitary secretion of human growth hormone (HGH). The amount of HGH measured in the serum during a period of 120 minutes after application of the challenge substance is dependent on the dopamine receptor sensitivity and is used as a parameter of the dopaminergic functional level.

Directly before the apomorphine application the test person fills out the "Tridimensional Personality Questionnaire"(TPQ) according to Cloninger and the "Freiburg Personality Inventory". Additionally a "List of Adjectives" (EWL) is used for rating the current characteristics of feeling.

30 male patients suffering from moderate to severe alcohol dependency over a period of several years according to ICD 10 and DSM-III-R, as well as healthy control persons were examined. In order to avoid falsification of the test parameters due to intoxication the examination was done in detoxicated condition after 6 weeks of hospital-controlled sobriety.

Evaluation of the 15 test subjects carried out up to now shows a high significant correlation between the personality trait "novelty seeking" and the dopaminergic functional level in alcohol-dependent men. Further evaluations will be presented.