

## **The urinary MHPG/creatinine ratio and its relationship to platelet monoamine oxidase activity in abstinent alcoholics.**

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### **Abstract**

This study was designed to assess the baseline noradrenergic turnover of subgroups of postwithdrawal abstinent alcoholics and healthy controls. The method chosen was an overnight fasting urine sample of the breakdown product of norepinephrine, MHPG, related to urinary creatinine. A comparison was made with platelet monoamine oxidase activity and also within subgroups of the study population. This study found no difference between alcoholics and controls, nor between subgroups of postwithdrawal alcoholics in their level of urinary MHPG corrected for creatinine, and no significant correlation with major subject characteristics or with platelet monoamine oxidase. There was a trend, however, towards a significant correlation with duration of abstinence from alcohol, and there was a correlation with a history of fighting when drinking alcohol, but not with sociopathic traits overall. Within the type 2 alcoholics there was a significant correlation with a history of fighting when drinking and a negative correlation with behavioral tolerance to alcohol. It is possible that only the subset of type 2 alcoholics with certain antisocial characteristics have noradrenergic abnormalities. Although no statistical difference was found between the different groups under study, the information is helpful in increasing understanding of the noradrenergic system in abstinent alcoholics.