Title
GENETIC RISK FACTORS FOR HEAVY DRINKING AND FOR SPECIFIC CONSEQUENCES

Permalink
https://escholarship.org/uc/item/0z344898

Author
Schuckit, MA

Publication Date
2015-09-01

Peer reviewed
SY08-1
GENETIC RISK FACTORS FOR HEAVY DRINKING AND FOR SPECIFIC CONSEQUENCES
M A. Schuckit
University of California San Diego Medical School, La Jolla
California USA, 92037

Background. Genes explain almost 60% of the overall risk for alcohol use disorders (AUDs), and impact on which consequences of heavy drinking a person is more likely to experience. Methods: The data presented here were generated from a systematic literature review of genetic influences that affect the likelihood of developing heavy drinking and associated alcohol problems. The emphasis was placed on how genes affect the risks for specific sequelae related to the gastrointestinal system, especially vulnerabilities related to the liver.

Results. Genetic variations affect vulnerabilities toward greater or lesser alcohol-related changes in liver function tests (e.g., GGT), the degree of damage and deposition of collagen in the liver, and vulnerabilities toward alcohol-induced pancreatitis. The search for specific genes contributing toward these phenomena (e.g., homozygotes for ALDH2,2, and variations in ADH1B) are important to consider in counselling young drinkers and those with heavy alcohol intake regarding the risks they carry for potentially lethal alcohol-related disorders.

Conclusions. Great strides have been made in recent years regarding genetic polymorphisms that contribute to both the risk for and consequences associated with AUDs. These factors are important in identifying individuals engaging in heavy drinking, properly interpreting the results of liver monitoring, and in Brief Interventions physicians are likely to carry out in efforts to help their patients.