

A9 allele of the dopamine transporter gene is associated with delirium tremens and alcohol-withdrawal seizure.

Gorwood P; Limosin F; Batel P; Hamon M; Ades J; Boni C. *Biological Psychiatry* 53(1): 85-92, 2003. (63 refs.)

Prior research has indicated that the dopamine transporter (DAT) gene is involved in regulation of dopaminergic neurotransmission, and possibly implicated in severity of alcohol withdrawal symptoms. This study analyzed the possible role of the A sub 9 allele of the DAT gene in the risk for alcohol withdrawal seizure (AWS) and delirium tremens (DT). DNA amplification and genotyping were performed and allele and genotype distributions were compared in 120 French alcohol-dependent patients and 65 healthy control subjects. Lifetime withdrawal symptoms of the patients and potential confounding factors also were assessed. Alcohol-dependent patients with the A sub 9 allele had experienced AWS or DT at least once, and this association remained after excluding those with antisocial personality comorbidity or considering only older patients. Findings indicate a significant role for the DAT gene in risk for severe withdrawal symptoms. If these results are replicated in larger samples, they suggest that analysis of the DAT gene could be useful in assessing the risk for severe complications among alcohol-dependent patients. Copyright 2003, Society of Biological Psychiatry.

Alcohol high risk drinking, abuse and dependence among tobacco smoking medical care patients and the general population.

John U; Hill A; Rumpf HJ; Hapke U; Meyer C. *Drug and Alcohol Dependence* 69(2): 189-195, 2003. (69 refs.)

Background: Little is known about the synergies of smoking and alcohol consumption in medical care patients. The objective, therefore, is to estimate the coincidence of hazardous and harmful alcohol consumption as well as alcohol abuse and dependence with tobacco smoking in a general hospital and general practices. Methods: Three samples of 18-64 year olds include 510 consecutively admitted currently smoking in-patients of a general hospital, 271 patients of a randomized sample of general practices, and 1567

current smokers from a regional population in Germany. Data include the number of cigarettes and a diagnosis of alcohol dependence and abuse (DSM), harmful or hazardous alcohol use. Results: The rates of current daily cigarette smokers with an alcohol dependence or abuse, harmful or hazardous alcohol consumption are 47.1% in the general hospital and 32.1% in the general practice sample compared with 18.4% in the general population. The rates increase from nonsmokers to smokers and with the number of cigarettes. Conclusions: The findings fit into the evidence about alcohol and tobacco interactions in morbidity and mortality. General medical care settings are appropriate for the detection of alcohol dependence or abuse via, smoking. Copyright 2003, Elsevier Science Ltd.

Allergic and asthmatic reactions to alcoholic drinks. (review).

Vally H; Thompson PJ. *Addiction Biology* 8(1): 3-11, 2003. (93 refs.)

Alcoholic drinks are capable of triggering a wide range of allergic and allergic-like responses, including rhinitis, itching, facial swelling, headache, cough and asthma. Limited epidemiological data suggests that many individuals are affected and that sensitivities occur to a variety of drinks, including wine, beer and spirits. In surveys of asthmatics, over 40% reported the triggering of allergic or allergic-like symptoms following alcoholic drink consumption and 30-35% reported worsening of their asthma. Sensitivity to ethanol itself can play a role in triggering adverse responses, particularly in Asians, which is due mainly to a reduced capacity to metabolize acetaldehyde. In Caucasians, specific non-alcohol components are the main cause of sensitivities to alcoholic drinks. Allergic sensitivities to specific components of beer, spirits and distilled liquors have been described. Wine is clearly the most commonly reported trigger for adverse responses. Sensitivities to wine appear to be due mainly to pharmacological intolerances to specific components, such as biogenic amines and the sulphite additives. Histamine in wine has been associated with the triggering of a wide spectrum of adverse symptoms, including sneezing, rhinitis, itching, flushing, headache and asthma. The sulphite additives in wine have been associated with triggering asthmatic responses. Clinical studies have confirmed sensitivities to the sulphites in wine in limited numbers

of individuals, but the extent to which the sulphites contribute to wine sensitivity overall is not clear. The aetiology of wine-induced asthmatic responses may be complex and may involve several co-factors. Copyright 2003, Carfax, Ltd.

Hepatitis C and alcohol: Interactions, outcomes, and implications. (review).

Bhattacharya R; Shuhart MC. *Journal of Clinical Gastroenterology* 36(3): 242-252, 2003. (112 refs.)
 Background: Alcoholism and chronic hepatitis C (HCV) infection are common causes of liver disease worldwide. Hepatitis C virus and alcohol use frequently coexist, and together lead to more rapid progression of liver disease. Goals: To critically review the literature pertaining to the combined effects of alcohol and HCV, focusing primarily on how alcohol influences the natural history, pathogenesis, and treatment of HCV liver disease. Study: A thorough review of the English literature was conducted, using a MEDLINE-based computerized literature search and review of cited references. Results: Hepatitis C virus is prevalent in unselected alcoholic populations (14-36%) and in alcoholic individuals with liver disease (less than or equal to 51%). Hepatitis C virus-infected individuals who drink alcohol in excess have more severe histologic injury, more rapid disease progression, and a higher frequency of cirrhosis and hepatocellular carcinoma. Alcohol use also appears to decrease response rates to interferon therapy. The mechanisms of interaction between alcohol and HCV are not fully understood, but they likely include the effects of alcohol on the host immune system and the virus and on other factors possibly related to HCV liver disease and hepatic carcinogenesis. Conclusions: Alcohol use and HCV infection frequently coexist. Although there is ample evidence that alcohol use adversely affects the natural history of HCV liver disease, how the two interact is not well understood. Patients with chronic HCV should be encouraged to avoid alcohol; however, the threshold above which alcohol results in accelerated liver disease remains to be determined. Copyright 2003, Raven Press, Ltd.

Common medications and drugs: How they affect male fertility.

Nudell DM; Monoski MM; Lipshultz LI. *Urologic Clinics of North America* 29(4): 965-973, 2002. (61 refs.)
 Medications and drugs impair male fertility through direct gonadotoxic effects, alteration of the hypothalamic-pituitary-gonadal (HPG) axis, impairments in ejaculation and erectile function, and adverse effects on libido. This literature review explores how medications

and drugs affect male fertility, organized by class of drug. (1) Recreational and Illicit Drugs: Chronic alcohol use leads to impotence, reduced libido, feminization, and gynecomastia induced by a reduction in serum testosterone and increased metabolic clearance of testosterone by the liver. Acute alcohol ingestion detrimentally affects semen quality. Impaired morphology occurs when ethanol was added to sperm in high concentrations. Cigarette smoking negatively impacts sperm production, motility, and morphology, and in men, hormonal alterations. Marijuana interferes with spermatogenesis. (2) Chemotherapeutic Agents: These agents destroy spermatogenic stem cells in the testes leading to sterility. They also damage germinal epithelium and Sertoli cells, causing oligospermia or azoospermia. (3) Antihypertensive Agents: These agents impair fertility via sexual dysfunction, exacerbating inadequate blood flow to male genitals. (4) Hormonal Medications: Anabolic steroids affect fertility by suppressing HPG axis via feedback inhibition, resulting in hypogonadism and erectile dysfunction. (5) Psychotherapeutic Agents affect male fertility by inhibiting sexual function. (6) Antibiotics can cause maturation arrest in the testis, causing an inability of testicular cells to use carbohydrates and oxygen. Other medications (cimetidine, cyclosporine, colchicine, allopurinol, sulfasalazine, and viagra) are discussed. Mechanisms of impaired fertility include direct effects on germ cells, the delicately balanced HPG axis, erectile function, and libido. Physicians need to assess male patients' medication and recreational drug/alcohol use and social habits. Copyright 2002, W. B. Saunders Co.

Increase in common cold symptoms and mouth ulcers following smoking cessation.

Ussher M; West R; Steptoe A; McEwen A. *Tobacco Control* 12(1): 86-88, 2003. (12 refs.)
 Objective: To examine changes in reports of common cold symptoms and mouth ulcers following smoking cessation. It was hypothesised that reports of these symptoms would increase on stopping smoking. Design: Smokers - were assessed one week before stopping smoking (baseline), then after one, two, and six weeks of smoking abstinence. Participants: 174 smokers attending a seven week smoking cessation programme combining behavioural support with nicotine patches. Main outcome measures: Self reports of cold symptoms, mouth ulcers, and smoking abstinence (validated using expired carbon monoxide) were recorded on each measurement occasion. Results: Following one, two, and six weeks of smoking abstinence 73.0% (127/174), 57.5% (100/174), and 44.8% (78/174) of the participants, respectively, maintained continuous abstinence

and provided reports of cold symptoms and mouth ulcers. For those abstinent from smoking for six weeks, relative to baseline, a significant increase in reports of the number of cold symptoms was observed following one and two weeks of smoking abstinence ($p = 0.009$ and $p = 0.038$, respectively) and an increase in reports of mouth ulcers after one and two weeks of abstinence ($p = 0.004$ and $p = 0.008$, respectively). Following one week of abstinence significant increases in reports of sore throat, coughing, deafness, and sneezing were observed ($p = 0.049$, $p < 0.001$, $p < 0.039$, and $p < 0.003$, respectively). Conclusions: This is the first study to systematically document significant increases in cold symptoms and mouth ulcers following smoking cessation. Smokers should be informed that they have an increased chance of experiencing these symptoms on stopping smoking. Being psychologically prepared for these effects may reduce their impact on the attempt to stop smoking. Copyright 2001, BMJ Publishing Group.

Fatal water intoxication of an army trainee during urine drug testing.

Gardner JW; Gutmann FD. *Military Medicine* 167(5): 435-437, 2002. (167 refs.)

An Army trainee developed acute water intoxication, hyponatremia, pulmonary edema, and fatal cerebral edema. This is the first report of a fatality related to urine drug testing. This resulted from supervised excessive water ingestion in an attempt to induce a sufficient urine specimen for substance abuse testing. To avoid a similar preventable death in the future, we make several recommendations. These include limiting the volume of ingested fluid to eight ounces every 30 to 45 minutes, not to exceed 40 ounces, and providing a relaxed, reassuring environment when obtaining urine specimens for substance abuse detection. Copyright 2003, Association of Military Surgeons of the United States.

Management of drug and alcohol withdrawal. (review).

Kosten TR; O'Connor PG. *New England Journal of Medicine* 348(18): 1786-1795, 2003. (67 refs.)

Each year in the United States, approximately 8.2 million persons are dependent on alcohol and 3.5 million are dependent on illicit drugs, including stimulants (1 million) and heroin (750,000).¹ In a sample from primary care practice, 15 percent of patients had either an "at-risk" pattern of alcohol use or an alcohol-related health problem, and 5 percent had a history of illicit-drug use.² With rates of substance use so high, all patients should be carefully screened with validated instrument. This review article covers the management of withdrawal for three major drug classes: sedatives,

opiates, and stimulants. The discussion of sedative withdrawal -- alcohol and benzodiazepines -- covers clinical presentation and general management, and pharmacologic treatment. The discussion of opiates reviews the clinical presentation, treatment with opioid and non-opioid medications, as well as "ultra-rapid: detoxification. Discussion of stimulants centers on cocaine and amphetamines and again addresses withdrawal, clinical presentation and treatment. The article concludes with attention to the role of the generalist physician, patient clinical characteristics, and referral as compared with direct treatment. Copyright 2003, Massachusetts Medical Society.

Poisoned patients as potential organ donors: Postal survey of transplant centres and intensive care units.

Wood DM; Dargan PI; Jones AL. *Critical Care* 7(2): 147-154, 2003. (36 refs.)

Background: The number of patients awaiting allograft transplantation in the UK exceeds the number of organs offered for transplantation each year. Most organ donors tend to be young, fit and healthy individuals who die because of trauma or sudden cardiac arrest. Patients who die from drug and poison intoxication tend to have similar characteristics but are less frequently offered as potential organ donors. Methods A postal questionnaire survey of all transplantation centres and an equal number of intensive care units in the UK was undertaken. The use of kidney, heart, lung, liver and pancreas transplants from poisoned patients following deliberate methanol ingestion, cardiac arrest presumed secondary to cocaine overdose, accidental domestic carbon monoxide inhalation and industrial cyanide exposure were used as case scenarios. Results Response rates-were 70% for transplantation centres and 50% for intensive care unit directors. Over 80% of organs would be offered or discussed with transplant coordinators by intensive care unit directors. Transplantation physicians/surgeons would consider transplanting organs in up to 100% of case scenarios, depending on the organ and poisoning or intoxication involved. Discussion The postal survey presented here shows that most transplantation physicians and surgeons and intensive care unit directors would consider those who die following acute drug intoxication and poisoning as potential organ donors. The previously reported literature shows in general that transplanted organs from poisoned patients have good long-term survival, although the number of reports is small. Poisoned patients are another pool of organ donors who at present are probably underused by transplantation services.

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Changing trends in heroin-related deaths in Sydney, Australia: 1995 to 1999.

Sheedy DL; Garrick TM; Fortis; Andrew H; Harper CG. *American Journal on Addictions* 12(1): 52-59, 2003. (26 refs.)

Abstract This 1997-1999 study replicates an earlier one (1995-1997) in which coronial cases were reviewed at the Department of Forensic Medicine in Australia. Ten percent of the 2945 cases were considered accidental illicit drug deaths, compared to 4% in the previous study. Heroin was associated with 90% of the deaths, but in only 17% of these cases as a single drug. Concomitant drug use, in particular alcohol, benzodiazepines, and antidepressants, has increased considerably. The combined effects of these substances might play a role in the disturbingly large increase in heroin (morphine) related deaths during this period. Copyright 2003, American Academy of Psychiatrists in Alcoholism and Addictions

Are smoking and other lifestyle factors associated with female urinary incontinence? The Norwegian EPINCONT Study.

Hannestad YS; Rortveit G; Daltveit AK; Hunskaar S. *BJOG: An International Journal of Obstetrics and Gynaecology* 110(3): 247-254, 2003. (32 refs.)

Objective: To examine whether modifiable lifestyle factors such as smoking, obesity, physical activity and intake of alcohol or caffeinated drinks were associated with urinary incontinence in women. Design" Cross sectional population-based study. Setting The Norwegian Epidemiology of Incontinence in the County of Nord-Trøndelag (EPINCONT) Study is part of a large survey performed in a county in Norway during 1995-1997. Population: Women greater than or equal to 20 years (n = 34,755, 75% of the invited) attended the first part of the survey and received the questionnaire. There were 27,936 (80% of source population) women who completed the incontinence part of the questionnaire. Methods Questionnaire covering several health topics including urinary incontinence was received at a screening station. Logistic regression analysis was used to adjust for confounding and to establish associations with the different outcomes under investigation: any incontinence, severe incontinence and stress, urge and mixed subtypes. Main outcome measures: Effect

measure were odds ratios with corresponding 95% confidence intervals. Results Former and current smoking was associated with incontinence, but only for those who smoked more than 20 cigarettes per day. Severe incontinence was weakly associated with smoking regardless of number of cigarettes. The association between increasing body mass index and incontinence was strong and present for all subtypes. Increasing levels of low intensity physical activity had a weak and negative association with incontinence. Tea drinkers were at slightly higher risk for all types of incontinence. We found no important effects of high intensity physical activity, intake of alcohol or coffee. Conclusions: Several potentially modifiable lifestyle factors are associated with urinary incontinence. Highest odds ratios were found for body mass index, heavy smoking and tea drinking. Copyright 2003, Blackwell Scientific Publications, Ltd.

Use of buprenorphine in pregnancy: Patient management and effects on the neonate. (review).

Johnson RE; Jones HE; Fischer G. *Drug and Alcohol Dependence* 70(2, Supplement 1): S87 - S101, 2003. (97 refs.)

It is estimated that 55–94% of infants born to opioid-dependent mothers in US will show signs of opioid withdrawal. Buprenorphine has been reported to produce little or no autonomic signs or symptoms of opioid withdrawal following abrupt termination in adults. To date, there have been 21 published reports representing approximately 15 evaluable cohorts of infants exposed to buprenorphine in utero. Of approximately 309 infants exposed, a neonatal abstinence syndrome (NAS) has been reported in 62% infants with 48% requiring treatment; apparently greater than 40% of these cases are confounded by illicit drug use. The NAS associated with buprenorphine generally appears within 12–48 h, peaks at approximately 72–96 h, and lasts for 120–168 h. These results appear similar to or less than that observed following in utero exposure to methadone. From a review of the literature, buprenorphine appears to be safe and effective in both mother and infant with an NAS that may differ from methadone both qualitatively and quantitatively. Copyright 2003, Elsevier Science.