



SUBSTANCE ABUSE

Naltrexone and disulfiram in patients with alcohol dependence and comorbid psychiatric disorders.

Petrakis IL, Poling J, Levinson C, Nich C, Carroll K, Rounsaville B; VA New England VISN I MIRECC Study Group.

Biol Psychiatry. 2005 May 15;57:1128-37.

More consecutive days of abstinence from alcohol were observed in 65 outpatients taking open-label disulfiram and blinded naltrexone (69(SD24)), 66 taking open-label disulfiram and blinded placebo (71(SD24)), or 59 taking naltrexone alone (67(SD26)) versus 64 taking placebo alone (61(SD30)) ($p=.04$), but no other measure of alcohol use differed between groups and taking both medications was not superior to taking either alone, in this randomized 12-week VA study of patients with comorbid Axis I disorders analyzed by intention to treat. See Table 2.

A previous trial had shown 39% abstinence in patients who had taken acamprosate for a year versus 17% for placebo after 2 years of follow-up (*Arch Gen Psychiatry*. 1996 Aug;53:673-80). Naltrexone appears to decrease alcohol use in the short term (*Cochrane Database Syst Rev*. 2005 Jan 25;(1):CD001867).

CHILD

Neonatal signs after late in utero exposure to serotonin reuptake inhibitors: literature review and implications for clinical applications.

Moses-Kolko EL, Bogen D, Perel J, Bregar A, Uhl K, Levin B, Wisner KL.

JAMA. 2005 May 18;293:2372-83.

A risk ratio of 3.0 (95CI 2.0-4.4) of a mild, self-limited neonatal behavioral syndrome involving CNS, respiratory, and GI signs is seen in neonates with late gestational exposure to serotonin reuptake inhibitors versus those with early gestational or no exposure, according to this review of 13 case reports and 9 cohort studies. See Table 5.

Although antidepressant use during pregnancy has not been linked to major birth defects or developmental abnormalities, antidepressant use near term is associated with occasional drug

effects or withdrawal syndromes in neonates (*JAMA*. 1999 Oct 6;282:1264-9). There is insufficient evidence to recommend use of antidepressants immediately postpartum to prevent depression (*Cochrane Database Syst Rev*. 2005 Apr 18;(2):CD004363).

Clinical practice. Overweight children and adolescents.

Dietz WH, Robinson TN.

N Engl J Med. 2005 May 19;352:2100-9.

The assessment and management of overweight in children and adolescents are discussed in detail. See Table 3.

Although there have been numerous clinical trials to assess the treatment of pediatric obesity (*Pediatrics*. 1998 Mar;101:554-70), there are insufficient data to guide treatment choices for the general population (*Cochrane Database Syst Rev*. 2003;(3):CD001872). However, it appears that increased physical activity may help prevent childhood obesity (*Cochrane Database Syst Rev*. 2002;(2):CD001871).

FORENSICS

Firearm Violence Exposure and Serious Violent Behavior

Bingenheimer JB, Brennan RT, Earls FJ

Science. 2005 May 27;308:1323-6.

Twice the probability to commit violence was seen in 283 adolescents in Chicago who had witnessed firearm violence in the past 2 years, compared to 942 who had not, and the two groups differed in multiple aspects including demographics, temperament, and family environment, in this 5-year, interview-based cohort study using propensity score stratification. See Figure 2.

Firearms in the home, as well as drug use and physical abuse, have been linked to increased homicide by a family member or intimate partner (*N Engl J Med*. 1993 Oct 7;329:1084-91); however, there is no evidence for or against screening for domestic violence in patients with dental or facial injuries or providing intervention programs for these patients (*Cochrane Database Syst Rev*. 2004;(2):CD004486).

Unspeakably cruel--torture, medical ethics, and the law.

Annas GJ.

N Engl J Med. 2005 May 19;352:2127-32.

US law regarding torture is reviewed, in light of physicians' complicity in the events at Guantanamo and Abu Ghraib prisons.

Among Cambodians in refugee camps, who had experienced a variety of traumas including torture, about 55% had major depression and 15% PTSD (*JAMA*. 1993 Aug 4;270:581-6). Pharmacotherapy (*Cochrane Database Syst Rev*. 2000;(4):CD002795) and trauma-focused psychotherapy (*Cochrane Database Syst Rev*. 2005 Apr 18;(2):CD003388) can help reduce PTSD symptoms, but single session debriefing shows no benefit in PTSD prevention (*Cochrane Database Syst Rev*. 2002;(2):CD000560).

Volume reduction in prefrontal gray matter in unsuccessful criminal psychopaths.

Yang Y, Raine A, Lencz T, Bihrlle S, LaCasse L, Colletti P.

Biol Psychiatry. 2005 May 15;57:1103-8.

Twenty-two percent less frontal gray matter was seen in 16 psychopaths convicted of crimes compared to 23 control subjects, whereas 13 psychopaths not convicted of a crime had no significant reduction in frontal gray volume; and higher scores on the Psychopathy Checklist-Revised were associated with lower frontal gray volumes, in this MRI study. See Figure 1.

A similar study showed an 11-percent reduction in frontal gray matter volume in volunteers with antisocial personality disorder versus healthy and mentally ill controls (*Arch Gen Psychiatry*. 2000 Feb;57:119-27). Family interventions for adolescents with conduct disorder may reduce time spent in institutions (*Cochrane Database Syst Rev*. 2001;(2):CD003015).

EBM

Relative citation impact of various study designs in the health sciences.

Patsopoulos NA, Analatos AA, Ioannidis JP.

JAMA. 2005 May 18;293:2362-6.

More citations were received by meta-analyses than any other type of study published in 1991 and 2001, whereas randomized controlled trials received more citations than cohort and case-control studies and nonsystematic reviews in 2001 but not 1991, according to this review of the 2-year and total citation counts of 2646 articles. See Figure 1.

Evidence-based medicine's pursuit of the best available evidence has been criticized as missing more suitable evidence that is tailored to the individual patient and addresses a greater diversity of questions (*Am J Med*. 1997 Dec;103:529-35); learning critical appraisal techniques seems to improve knowledge, but there is no evidence that it alters physician

practice or patient health (*Cochrane Database Syst Rev*. 2001;(3):CD001270).

PSYCHOLOGY

Psychology: red enhances human performance in contests.

Hill RA, Barton RA.

Nature. 2005 May 19;435:293

Red uniforms distributed randomly to martial artists, wrestlers, and boxers in the 2004 Olympics, when compared with alternately distributed blue uniforms, were associated with winning when the two contestants in a match were equally skillful.

There is no evidence demonstrating an athletic performance benefit for ephedrine, which leads to only modest, short-term weight loss and causes several adverse effects (*JAMA*. 2003 Mar 26;289:1537-45); a combination of ephedrine and caffeine may provide modest enhancement of short-term athletic performance, but with attendant adverse effects (*AHRQ Evidence reports and summaries*).



DUKE RESEARCH

MED-PSYCH

Gas exchange and exercise capacity affect neurocognitive performance in patients with lung disease.

Parekh PI, Blumenthal JA, Babyak MA, LaCaille R, Rowe S, Dancel L, Carney RM, Davis RD, Palmer S; INSPIRE Investigators. *Psychosom Med*. 2005 May-Jun;67:425-32.

Development and Validation of the Parent Experience of Child Illness.

Bonner MJ, Hardy KK, Guill AB, McLaughlin C, Schweitzer H, Carter K. *J Pediatr Psychol*. 2005 May 25

STEM CELLS

Isolation of neural stem cells from the postnatal cerebellum.

Lee A, Kessler JD, Read TA, Kaiser C, Corbeil D, Huttner WB, Johnson JE, Wechsler-Reya RJ. *Nat Neurosci*. 2005 Jun;8:723-9.

BIOLOGY

Automated segmentation of neuroanatomical structures in multispectral MR microscopy of the mouse brain.

Ali AA, Dale AM, Badea A, Johnson GA.
Neuroimage. 2005 May 19

Getting small is suddenly very big: review of the proceedings of the third annual meeting of the society for molecular imaging.

Provenzale JM, Mukundan S.

AJR Am J Roentgenol. 2005 Jun;184:1736-9.



FIGURE OF THE WEEK



N Engl J Med. 2005 May 19;352:2143-4.