



## Veterans Health Care July 2004

1: Ann Intern Med. 2004 Jul 20;141(2):112.

Comment on:

Ann Intern Med. 2004 Jul 20;141(2):85-94.

Summaries for patients. Can antibiotics cure Gulf War veterans' illnesses?

[No authors listed]

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2: Ann Intern Med. 2004 Jul 20;141(2):155-6.

Comment on:

Ann Intern Med. 2004 Jul 20;141(2):85-94.

The long aftermath of the 1991 gulf war.

Wessely S.

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3: Ann Intern Med. 2004 Jul 20;141(2):85-94.

Comment in:

Ann Intern Med. 2004 Jul 20;141(2):155-6.

Ann Intern Med. 2004 Jul 20;141(2):112.

Benefits and harms of doxycycline treatment for Gulf War veterans' illnesses: a randomized, double-blind, placebo-controlled trial.

Donta ST, Engel CC Jr, Collins JF, Baseman JB, Dever LL, Taylor T, Boardman KD, Kazis LE, Martin SE, Horney RA, Wiseman AL, Kernodle DS, Smith RP, Baltch AL, Handanos C, Catto B, Montalvo L, Everson M, Blackburn W, Thakore M, Brown ST, Lutwick L, Norwood D, Bernstein J, Bacheller C, Ribner B, Church LW, Wilson KH, Guduru P, Cooper R, Lentino J, Hamill RJ, Gorin AB, Gordan V, Wagner D, Robinson C, DeJace P, Greenfield R, Beck L, Bittner M, Schumacher HR, Silverblatt F, Schmitt J, Wong E, Ryan MA, Figueroa J, Nice C, Feussner JR; VA Cooperative #475 Group. **BACKGROUND:** It has been hypothesized that certain Mycoplasma species may cause Gulf War veterans' illnesses (GWVIs), chronic diseases characterized by pain, fatigue, and cognitive symptoms, and that affected patients may benefit from doxycycline treatment. **OBJECTIVE:** To determine whether a 12-month course of doxycycline improves functional status in Gulf War veterans with GWVIs. **DESIGN:** A randomized, double-blind, placebo-controlled clinical trial with 12 months of treatment and 6 additional months of follow-up. **SETTING:** 26 U.S. Department of Veterans Affairs and 2 U.S. Department of Defense medical centers. **PARTICIPANTS:** 491 deployed Gulf War veterans with GWVIs and detectable Mycoplasma DNA in the blood. **INTERVENTION:** Doxycycline, 200 mg, or matching placebo daily for 12 months. **MEASUREMENTS:** The primary outcome was the proportion of participants

who improved more than 7 units on the Physical Component Summary score of the Veterans Short Form-36 General Health Survey 12 months after randomization. Secondary outcomes were measures of pain, fatigue, and cognitive function and change in positivity for Mycoplasma species at 6, 12, and 18 months after randomization. RESULTS: No statistically significant differences were found between the doxycycline and placebo groups for the primary outcome measure (43 of 238 participants [18.1%] vs. 42 of 243 participants [17.3%]; difference, 0.8 percentage point [95% CI, -6.5 to 8.0 percentage points];  $P > 0.2$ ) or for secondary outcome measures at 1 year. In addition, possible differences in outcomes at 3 and 6 months were not apparent at 9 or 18 months. Participants in the doxycycline group had a higher incidence of nausea and photosensitivity. LIMITATIONS: Adherence to treatment after 6 months was poor. CONCLUSION: Long-term treatment with doxycycline did not improve outcomes of GWVIs at 1 year. PMID: 15262663

4: Hepatology. 2004 Jul;40(1):115-9.

Risk of diabetes in HIV infected veterans pre- and post-HAART and the role of HCV coinfection.

Butt AA, Fultz SL, Kwok CK, Kelley D, Skanderson M, Justice AC.

We examined the association of hepatitis C virus (HCV) infection with diabetes in veterans infected with human immunodeficiency virus (HIV) before and after the institution of highly active antiretroviral therapy (HAART). The role of age, race, liver disease, alcohol, and drug diagnoses upon the risk of diabetes was also determined. Male veterans with HIV who entered care between 1992 and 2001 were identified from the Veterans Affairs (VA) administrative database. Demographic and disease data were extracted. Kaplan-Meier curves were plotted to determine the incidence of diabetes. Unadjusted and adjusted hazards ratios for diabetes were determined using Cox regression method. A total of 26,988 veterans were studied. In multivariate Cox regression analysis, factors associated with a diagnosis of diabetes included increasing age (HR, 1.44 per 10-year increase in age; 95% CI, 1.39-1.49), minority race (African American: HR, 1.35; 95% CI, 1.24-1.48; Hispanic: HR, 1.63; 95% CI, 1.43-1.86), and care in the HAART era (HR, 2.35; 95% CI, 2.01-2.75). There was a significant interaction between care in the HAART era and HCV infection, with HCV infection being associated with a significant risk of diabetes in the HAART era (HR, 1.39; 95% CI, 1.27-1.53) but not in the pre-HAART era (HR, 1.01; 95% CI, 0.75-1.36). In conclusion, HIV-infected veterans in the HAART era are at a higher risk for diabetes compared with those in the pre-HAART era. HCV coinfection is associated with a significantly higher risk of diabetes in the HAART era, but not in the pre-HAART era. HCV-HIV coinfecting patients should be aggressively screened for diabetes.

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5: Qual Life Res. 2004 Jun;13(5):975-85.

Comparison of patient-based oral health outcome measures.

Jones JA, Kressin NR, Miller DR, Orner MB, Garcia RI, Spiro A 3rd.

OBJECTIVES: This project examined psychometric characteristics of four measures of oral-specific health-related quality of life. METHODS: We selected participants from two samples of community-dwelling male veterans from Boston (USA): (1) 538 users of VA outpatient medical care from the Veterans Health Study (VHS: mean age = 62); and (2) 211 relatively healthy men from the VA Dental Longitudinal Study (DLS: mean age = 70). Patient-based measures included the Geriatric Oral Health Assessment Instrument, the Oral Health Impact Profile (OHIP), the Oral Health-related Quality of Life instrument and the single-item self-report of oral health. Clinical variables included number of teeth, coronal decayed surfaces (CDS), a

modification of the Root Caries Index (RCI\_D), and the Community Periodontal Index of Treatment Need (CPITN). RESULTS: Cronbach's alpha ranged from 0.73 to 0.97. Percent of participants with floor and ceiling scores varied widely by instrument and by item. Patient-based measures were associated with all clinical measures in the combined sample. Number of teeth was associated with patient-based measures ( $p < 0.001$ ). However, CDS, RCI\_D and CPITN scores were associated with patient-based scores in the VHS but not in the DLS. The Geriatric Oral Health Assessment Instrument, the OHIP, the Oral Health-related Quality of Life instrument were strongly linearly related to the single-item global self-report of oral health ( $p < 0.0001$ ). CONCLUSION: All multi-item measures have high internal consistency and all are valid for measuring oral-specific health-related quality of life.  
PMID: 15233511

6: Ment Health Serv Res. 2003 Sep;5(3):149-53.

Administrative prescription review procedures and use of atypical antipsychotic medications in the Department of Veterans Affairs.

Rosenheck R, Leslie D.

Atypical antipsychotic medications vary in cost with limited evidence of differences in effectiveness. Administrative prescription review has been proposed as a way of encouraging use of less expensive medication when there is no specific clinical justification for using more expensive medication. This study examined data from a national GAO survey of 876 veterans affairs (VA) psychiatrists, and national administrative data on the proportion of veterans actually receiving atypical antipsychotic medications. The proportion of psychiatrists in each region reporting that they did not feel free to prescribe expensive drugs when indicated was negatively correlated with the proportion of patients who filled prescriptions for clozapine, the most expensive atypical. The proportion reporting review procedures for prescribing olanzapine was significantly and negatively correlated with the proportion of veterans actually receiving prescriptions for olanzapine and, positively associated with the proportion prescribed risperidone. Nondirective administrative review procedures in VA are significantly associated with actual prescribing patterns and may generate modest cost savings in the prescription of atypical antipsychotic medication.

PMID: 15224448

7: J Occup Environ Hyg. 2004 Jan;1(1):D10-6.

The development of an ergonomics training program to identify, evaluate, and control musculoskeletal disorders among nursing assistants at a state-run veterans' home.

Peterson EL, McGlothlin JD, Blue CL.

Nursing assistants (NAs) who work in nursing and personal care facilities are twice and five times more likely, respectively, to suffer a musculoskeletal disorder compared to service industries and other health care facilities, respectively. The purpose of this study was to develop an ergonomics training program for selected NAs at a state-run veterans' home to decrease musculoskeletal disorders by 1) developing questionnaires to assess musculoskeletal stress, 2) evaluating the work environment, 3) developing and using a training package, and 4) determining the application of the information from the training package by NAs on the floor. Results show two new risk factors not previously identified for nursing personnel in the peer-reviewed literature. Quizzes given to the nursing personnel before and after training indicated a significant improvement in understanding the principles of ergonomics and patient-handling techniques. Statistical analysis comparing the pre-training and post-training questionnaires indicated no significant decrease in musculoskeletal risk

factors and no significant reduction in pain or discomfort or overall mental or physical health.

PMID: 15202149

8: Am J Med Sci. 2004 Jun; 327(6):319-23.

Contributions of weekly mean blood glucose values to hemoglobin A1c in insulin-treated type 2 diabetes: the Diabetes Outcomes in Veterans Study (DOVES).

Murata GH, Hoffman RM, Duckworth WC, Wendel CS, Shah JH; Diabetes Outcomes in Veterans Study.

**BACKGROUND:** Daily self-monitored blood glucose testing is recommended for patients with insulin-treated type 2 diabetes. However, most patients do not test frequently enough for optimal glycemic control. Less frequent testing may be sufficient for assessing glycemic control among stable patients as well as improving patient compliance. The study objective was to evaluate the weekly contribution of glucose readings to hemoglobin (Hb)A1c during an 8-week period of intensified self-monitored blood glucose testing. **METHODS:** The authors randomly selected stable, insulin-treated subjects with type 2 diabetes. Subjects monitored their blood glucose four times daily for 8 weeks; the authors then downloaded glucose meters and measured an HbA1c. Mean blood glucose values were calculated for each of the 8 weeks. Multiple linear regression analyses examined the contribution of these mean values to the HbA1c. **RESULTS:** A total of 182 subjects completed the monitoring protocol; mean HbA1c was 7.63 +/- 1.42%, mean glucose was 9.78 +/- 2.27 mmol/L, the regression correlation was 0.77, P < 0.001. A fitted multiple linear model using all 8 weekly mean blood glucose values showed large variation in their independent contributions to the HbA1c. Mean blood glucose values from consecutive weeks were highly correlated and did not provide independent information about glycemic control. Stepwise regression showed that the mean blood glucose values from weeks 4, 6, and 8 significantly and equally influenced HbA1c. **CONCLUSIONS:** Glycemic control can be efficiently assessed by reviewing at least 5 weeks' worth of monitoring results, focusing on alternate weeks and giving less weight to more remote readings.

PMID: 15201644 [

9: Otolaryngol Head Neck Surg. 2004 Jun; 130(6):659-65.

Survival of veterans with sleep apnea: continuous positive airway pressure versus surgery.

Weaver EM, Maynard C, Yueh B.

**OBJECTIVES:** Continuous positive airway pressure (CPAP) improves sleep apnea survival. We tested whether CPAP is associated with better survival than uvulopalatopharyngoplasty (UPPP). **STUDY DESIGN AND METHODS:** This retrospective cohort database study included all sleep apnea patients treated with CPAP or UPPP in Veteran Affairs facilities from October 1997 through September 2001. Treatment groups were compared with Cox regression, adjusting for age, gender, race, year treatment was initiated, and comorbidity. Sleep apnea severity and CPAP use data were not available. **RESULTS:** By September 2002, 1339 (7.1%) of 18,754 CPAP patients and 71 (3.4%) of 2,072 UPPP patients were dead (P < 0.001). After adjustment, CPAP patients had 31% (95% confidence interval, 3% to 7%, P = 0.03) higher probability of being dead at any time, relative to UPPP patients. **CONCLUSIONS:** UPPP confers a survival advantage over CPAP, after adjustment for age, gender, race, year of treatment, and comorbidity. However, we were unable to adjust for sleep apnea severity or CPAP use. Surgical treatment should be considered in sleep apnea patients who use CPAP inadequately.

PMID: 15195049

10: Health Phys. 2004 Jul;87(1):51-6.

Biologic monitoring for urinary uranium in gulf war I veterans.

McDiarmid MA, Squibb K, Engelhardt SM.

Biologic monitoring for total uranium in urine of Gulf War I veterans concerned about past exposure to depleted uranium (DU) has been offered by the Departments of Veterans Affairs and Defense since the late 1990's. DU, a component of U.S. munitions and tank armor, was first used during that conflict. Two hundred and twenty-seven veterans submitted samples for analysis from January 2000 through December 2002, which included a 24-h urine sample for determination of total urinary uranium concentration and completed questionnaires describing their wartime exposure experiences. Thirty questionnaire items characterizing DU exposure opportunities were collapsed into 19 exposure categories. Urine uranium (U) results were stratified into low and high uranium groups with 0.05 microg U/g creatinine as the cut point. Exposure scenarios in the high and low uranium groups were similar in frequency and type with only the presence of retained shrapnel being predictive of a high urine uranium value, as found in the first phase of this surveillance of 169 veterans performed prior to 2000. Twenty-two veterans exhibited U levels in the high range. Isotopic analysis, available for 21 of these 22, revealed that all but three of these samples contained natural and not depleted uranium. These three participants had retained DU shrapnel as a result of their past injuries. Thus, even with an enlarged cohort, elevated urine uranium values in the absence of retained DU fragments are unlikely. The utility of isotopic analysis to more fully characterize uranium biomonitoring results is also demonstrated.

PMID: 15194922

11: Mil Med. 2004 May;169(5):392-5.

Prevalence of in-service and post-service sexual assault among combat and noncombat veterans applying for Department of Veterans Affairs posttraumatic stress disorder disability benefits.

Murdoch M, Polusny MA, Hodges J, O'Brien N.

OBJECTIVE: To describe the prevalence of in-service and post-service sexual assault among combat and noncombat veterans seeking Veteran's Affairs disability benefits for posttraumatic stress disorder (PTSD). METHODS: Cross-sectional survey of 4,918 veterans. RESULTS: Surveys were returned by 3,337 veterans (effective response rate, 68%). Among men, 6.5% of combat veterans and 16.5% of noncombat veterans reported in-service or post-service sexual assault. Among women, 69% of combat veterans and 86.6% of noncombat veterans reported in-service or post-service sexual assault. CONCLUSIONS: Reported rates of sexual assault were considerably higher among veterans seeking Veteran's Affairs disability benefits for PTSD than historically reported rates for men and women in the general population. In this population, male gender and veterans' combat status should not dissuade clinicians from screening for sexual traumas.

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