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ARTICLES

Association between Critical Care Physician Management and Patient Mortality in the Intensive Care Unit 801

M.M. Levy, J. Rapoport, S. Lemeshow, D.B. Chalfin, G. Phillips, and M. Danis

Some hospitals staff their intensive care units (ICUs) solely with critical care specialists, whereas others allow physicians without critical care training to manage ICU patients. Levy and colleagues found that among 101 832 patients in 123 ICUs in the United States, those managed by critical care specialists were sicker, had more procedures, and had higher hospital mortality rates than those managed by other physicians. Mortality was higher even after adjustment for the tendency for sicker patients to be managed by critical care specialists. Further studies are needed to find the reasons for these results.

Sensitivity and Specificity of a Single Emergency Department Measurement of Urinary Neutrophil Gelatinase-Associated Lipocalin for Diagnosing Acute Kidney Injury 810

T.L. Nickolas, M.J. O'Rourke, J. Yang, M.E. Sise, P.A. Canetta, N. Barasch, C. Buchen, F. Khan, K. Mori, J. Giglio, P. Devarajan, and J. Barasch

The authors measured urinary neutrophil gelatinase-associated lipocalin (NGAL) in 635 patients being admitted to the hospital from the emergency department. Blinded to the urinary NGAL results, they determined whether the patients had renal disease and established its cause. A urinary NGAL level of 130 $\mu\text{g/g}$ creatinine or greater was highly discriminatory for acute kidney injury in the 30 patients who had such injury.

Declining Incidence of Hepatocellular Carcinoma in Osaka, Japan, from 1990 to 2003 820

H. Tanaka, Y. Imai, N. Hiramatsu, Y. Ito, K. Imanaka, M. Oshita, T. Hijioka, K. Katayama, I. Yabuuchi, H. Yoshihara, A. Inoue, M. Kato, T. Takehara, S. Tamura, A. Kasahara, N. Hayashi, and H. Tsukuma

Tanaka and colleagues report on the contribution of hepatitis C virus (HCV)-related hepatocellular carcinoma (HCC) to changes in HCC incidence in Osaka, Japan. Between 1981 and 2003, incidence of HCC among men age 50 to 59 years, 60 to 69 years, and 70 to 79 years peaked in 1986, 1995, and 2000, respectively, with marked downward trends thereafter. Trends were similar in women. The rates of HCV-associated HCC decreased, but those of HCC unrelated

to HCV did not change, suggesting that the decrease in HCC rates is related to the decreasing incidence of HCV.

Brief Communication: Pituitary Volume and Function in Competing and Retired Male Boxers 827

F. Tanriverdi, K. Unluhizarci, I. Kocyigit, I.S. Tuna, Z. Karaca, A.C. Durak, A. Selcuklu, F.F. Casanueva, and F. Kelestimur
In this cross-sectional study of 61 active and retired boxers, growth hormone and adrenocorticotropic hormone deficiencies were higher than would be expected in the general population. Nearly half of retired boxers (the participants with the longest boxing histories) had growth hormone deficiency. Physicians should be alert for pituitary dysfunction in patients who have participated in boxing.

REVIEW

Meta-analysis: Subclinical Thyroid Dysfunction and the Risk for Coronary Heart Disease and Mortality 832

N. Ochs, R. Auer, D.C. Bauer, D. Nanchen, J. Gussekloo, J. Cornuz, and N. Rodondi

The authors systematically reviewed 12 prospective cohort studies to determine whether subclinical thyroid dysfunction increases risk for coronary heart disease and death. Both subclinical hypothyroidism and hyperthyroidism may be associated with increased risk for coronary heart disease and death. However, the risk estimates are imprecise, and higher-quality studies found a lower risk associated with subclinical hypothyroidism. Whether the increased risk is real and clinically important may only be determined by randomized, placebo-controlled trials of treatment for subclinical thyroid dysfunction.

CLINICAL GUIDELINES

Screening for Type 2 Diabetes Mellitus in Adults: U.S. Preventive Services Task Force Recommendation Statement 846

U.S. Preventive Services Task Force

The U.S. Preventive Services Task Force (USPSTF) recommends screening for type 2 diabetes in asymptomatic adults with sustained blood pressure (either treated or untreated) greater than 135/80 mm Hg.

Summary for Patients I-30

Continued on page I-6

Screening Adults for Type 2 Diabetes: A Review of the Evidence for the U.S. Preventive Services Task Force 855

S.L. Norris, D. Kansagara, C. Bougatsos, and R. Fu
 To support the USPSTF recommendation in this issue, Norris and colleagues reviewed the evidence on potential benefits and harms of screening adults for type 2 diabetes in primary care settings. We lack direct and indirect evidence that early detection of type 2 diabetes by targeted or population-level screening improves health. Persons with hypertension probably benefit from screening. Although intensive lifestyle and pharmacotherapeutic interventions reduce the progression of prediabetes to diabetes, the long-term effect of these interventions on health outcomes is not known.

Summary for Patients I-30

ACADEMIA AND CLINIC

Performance during Internal Medicine Residency Training and Subsequent Disciplinary Action by State Licensing Boards 869

M.A. Papadakis, G.K. Arnold, L.L. Blank, E.S. Holmboe, and R.S. Lipner
 Whether unprofessional behavior during residency predicts unprofessional acts as a practicing physician is unknown. Among 66 161 internal medicine residents, a low professionalism rating during residency was associated with an increased risk for disciplinary action during practice. Good performance on the American Board of Internal Medicine certification examination was associated with a decreased risk. However, the probability that practitioners will face disciplinary action during their career is small, and most at-risk residents will never get into trouble with state licensing boards.

EDITORIALS

Are Intensivists Safe? 877

G.D. Rubenfeld and D.C. Angus
 In this issue, Levy and colleagues explore the effects of ICU physician staffing models on mortality. Their findings not only refute the claim that intensivist-staffed ICUs improve outcomes but raise the possibility that intensivists are actually harmful. However, the evidence that intensivist-staffed ICUs reduce mortality is strong and consistent, and a higher "dose" of intensivist care appears to confer additional benefit. Nonetheless, Levy and colleagues' data offer a unique opportunity to learn how to improve critical care.

Cardiovascular Consequences of Subclinical Thyroid Dysfunction: More Smoke but No Fire 880

P.W. Ladenson
 In this issue, Ochs and colleagues report a meta-analysis of

population-based cohort studies in which researchers examined whether disorders of thyroid function increase coronary heart disease events and mortality. Subclinical hypothyroidism poses minimal risk. Relative risks seemed to be larger among younger adults than older adults; however, a recent study argues that the true upper limit of normal serum thyroid-stimulating hormone level changes with age. We need an appropriately powered prospective, randomized, controlled, double-blind interventional trial of thyroxine therapy for subclinical hypothyroidism.

ON BEING A DOCTOR

Headache 882

M. Bhide

LETTERS

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Possible Benefit to Survival from Early Invasive Strategies in Patients with Acute Coronary Syndromes 883

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IN THE CLINIC

Hepatitis C ITC6-1

This issue provides a clinical overview of hepatitis C, focusing on prevention, diagnosis, treatment, practice improvement, and patient information. Readers can complete the accompanying CME quiz for 1.5 credits.

Cover photograph by Richard Gambescia

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