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ARTICLES

Cystatin C and Prognosis for Cardiovascular and Kidney Outcomes in Elderly Persons without Chronic Kidney Disease 237

M.G. Shlipak, R. Katz, M.J. Sarnak, L.F. Fried, A.B. Newman, C. Stehman-Breen, S.L. Seliger, B. Kestenbaum, B. Psaty, R.P. Tracy, and D.S. Siscovick

In this longitudinal study involving 4663 elderly persons without known kidney disease (estimated glomerular filtration rate ≥ 60 mL/min per 1.73 m²), increasing cystatin C concentration was associated with increased risks for death, stroke, myocardial infarction, heart failure, and progression to chronic kidney disease. These associations were much stronger for cystatin C than for creatinine.

Summary for Patients 1-22

Using Standardized Serum Creatinine Values in the Modification of Diet in Renal Disease Study Equation for Estimating Glomerular Filtration Rate 247

A.S. Levey, J. Coresh, T. Greene, L.A. Stevens, Y. Zhang, S. Hendriksen, J.W. Kusek, and F. Van Lente, for the Chronic Kidney Disease Epidemiology Collaboration

Using standardized creatinine assays, the authors remeasured serum creatinine levels in 1628 patients whose glomerular filtration rate (GFR) had been measured by urinary clearance of ¹²⁵I-iothalamate. They used these data to derive new equations for estimating GFR from age, sex, ethnicity, and serum creatinine and then measured their accuracy. The equations were inaccurate only when kidney function was near-normal.

The Association between Common Vitamin D Receptor Gene Variations and Osteoporosis: A Participant-Level Meta-Analysis 255

A.G. Uitterlinden, S.H. Ralston, M.L. Brandi, A.H. Carey, D. Grinberg, B.L. Langdahl, P. Lips, R. Lorenc, B. Obermayer-Pietsch, J. Reeve, D.M. Reid, A. Amidei, A. Bassiti, M. Bustamante, L.B. Husted, A. Diez-Perez, H. Dobnig, A.M. Dunning, A. Enjuanes, A. Fahrleitner-Pammer, Y. Fang, E. Karczmarewicz, M. Kruk, J.P.T.M. van Leeuwen, C. Mavilia, J.B.J. van Meurs, J. Mangion, F.E.A. McGuigan, H.A.P. Pols, W. Renner, F. Rivadeneira, N.M. van Schoor, S. Scollen, R.E. Sherlock, J.P.A. Ioannidis, APOSS Investigators, EPOS Investigators, EPOLOS Investigators, FAMOS Investigators, LASA Investigators, and Rotterdam Study Investigators, for the GENOMOS Study

This multicenter, prospective study involving 26 242

participants examined associations between vitamin D receptor polymorphisms (Cdx2 promoter, *FokI*, *BsmI*, *Apal*, and *TaqI*), bone mineral density (BMD), and fractures. These polymorphisms were not associated with BMD at the lumbar spine or femoral neck. Only the Cdx2 A-allele was associated with a small reduction in risk for vertebral fracture.

IMPROVING PATIENT CARE

Does Pay-for-Performance Improve the Quality of Health Care? 265

L.A. Petersen, L.D. Woodard, T. Urech, C. Daw, and S. Sookanan

This paper reviewed empirical studies that assessed the relationship between explicit financial incentives and the provision of high-quality health care. Thirteen of 17 studies examined the effect of incentives on process-of-care quality measures. Five of the 6 studies of physician-level financial incentives and 7 of the 9 studies of provider group-level financial incentives found partial or positive associations with measures of quality. One of the 2 studies of incentives at the payment-system level found a positive effect on access to care. In all, 4 studies suggested unintended effects of incentives.

Effects of Nurse Management on the Quality of Heart Failure Care in Minority Communities. A Randomized Trial 273

J.E. Sisk, P.L. Hebert, C.R. Horowitz, M.A. McLaughlin, J.J. Wang, and M.R. Chassin

This 12-month trial of assistance with managing systolic-dysfunction heart failure randomly assigned 406 ethnically diverse adults from Harlem, New York, to usual care or nurse management. Nurse management patients received counseling about sodium intake, fluid buildup, medication adherence, and self-management of symptoms. Nurses also regularly called patients and served as a bridge between patients and physicians. Compared with patients who received usual care, nurse management patients had fewer hospitalizations and better functioning.

Summary for Patients 1-28

REVIEW

Narrative Review: The Promotion of Gabapentin: An Analysis of Internal Industry Documents 284

M.A. Steinman, L.A. Bero, M.-M. Chren, and C.S. Landefeld

The authors used documents that became public through a

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court case to describe a manufacturer's methods to promote off-label uses of gabapentin. The manufacturer extensively used activities usually considered free of promotional intent, including continuing medical education and research, to promote gabapentin. Academic physicians played a large role in these activities. Academic medical centers must maintain a clearer separation between commercial activity and their mission of science and patient care.

UPDATE

Update in Gastroenterology and Hepatology 294

N.J. Greenberger and P. Sharma

This year's Update in Gastroenterology and Hepatology discusses Barrett esophagus, recurrent ulcer bleeding, colorectal cancer screening and prevention, traveler's diarrhea and *Clostridium difficile*-associated diarrhea, nonalcoholic fatty liver disease, smoking and chronic pancreatitis, and surgical treatment for obesity.

EDITORIALS

Decreased Kidney Function in the Elderly: Clinical and Preclinical, Neither Benign 299

J. Coresh and B. Astor

In this issue, Shlipak and colleagues show that 2 markers of decreased kidney function, estimated glomerular filtration rate and cystatin C, are strong risk factors for noncardiovascular death as well as cardiovascular death and incidence. The most urgent next step is to evaluate these markers in combination with data on albuminuria.

Making Sense of Puzzling Genetic Association Studies: A Team Approach 302

J.S. Lee and M.A. Tucker

In the next quarter-century, the number of individuals affected by osteoporosis and related fractures will double. Understanding the pathogenesis of osteoporosis will require characterizing the interplay among multiple gene variants, gene products, environmental mediators, and bone. This is an essential step toward discovery of drugs that target the causative biological mechanism. In this issue, Uitterlinden and colleagues provide an excellent example that multicenter collaborative studies are crucial to efficiently and correctly identifying genes involved in osteoporosis and other complex diseases.

Safeguarding Patient Welfare: Who's in Charge? 305

J.E. Henney

The article by Steinman and colleagues in this issue on the marketing of gabapentin guides the author's discussion of off-label uses of drugs, the changing regulatory power of the U.S. Food and Drug Administration, the role of industry, and the involvement of the medical profession in promoting

off-label use, as well as clinicians' fundamental obligation to protect the best interests of their patients.

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Moves On 301

G.N. Braman

ON BEING A DOCTOR

The "Practice" of Medicine 308

M. Papper

Anyone becoming a doctor will at some point be told by a reluctant patient, "You're not practicing on me," or "I'm not having a medical student or a resident learning on me." Usually, what ensues is a cowardly exodus of the trainee from the patient's room and a quick plea to the attending physician.

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Pulmonary Embolism in Patients with Unexplained Exacerbations of Chronic Obstructive Pulmonary Disease 310

G. Le Gal and M. Righini; I. Tillie-Leblond, C.-H. Marquette, and T. Perez

Clinical Observations

Lipohypertrophy in Acromegaly Induced by the New Growth Hormone Receptor Antagonist Pegvisomant 310

P. Maffei, C. Martini, C. Pagano, N. Siculo, and F. Corbetti

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Correction: Book Notes: *The Health Care Mess: How We Got Into It and What It Will Take To Get Out* 312

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J. Fisher Wilson

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