Monitoring Chronic Patients Between Primary Care and Cardiology. Response

Seguimiento de pacientes crónicos entre atención primaria y cardiología. Respuesta

To the Editor,

Coordination between levels of care is essential if we are to achieve more efficient health care. Lack of coordination can arise through lack of knowledge, poor communication, a dearth of protocols, high burdens of care, and other systematic barriers.

The integrated care model in cardiology[1] transformed the traditional system with its 3 separate levels of care into an integrative model in which a hospital cardiologist works as part of a primary care team. Although we used information and communication technologies, shared medical records, and a computing platform for the transmission of information, above all we encouraged personal contact between professionals. Consulting sessions, the possibility of immediate consultation by phone or e-mail, and the development of agreed clinical guidelines were essential to improving coordination.

The aim was not to reduce later visits, but to improve patient care through integration. The primary care team took the lead role in controlling stable chronic patients while the cardiologist acted as a consultant and focused on assessing new disease and monitoring patients who required closer control.

We do not agree that the responsibility for health rests solely with the family physician and the citizen. The multidisciplinary element in the integrative approach means that responsibilities are shared between the primary care team and cardiologists.[2] By organizing, distributing, and influencing resources, managers, public administrators, and scientific societies also have a share of the responsibility.

While information technology and communication play an important part in integrated health care, they are only tools to help health care professionals. Technological advances are not always accompanied by demonstrable benefits for patients.[3] Although it is reasonable to assume that e-Health is useful, its impact must be demonstrated objectively.

Carlos Falces,* and Rut Andrea

Servicio de Cardiología, Instituto Clínico del Tórax, Hospital Clínic, IDIBAPS, Universidad de Barcelona, Barcelona, Spain

*Corresponding author:
E-mail address: cfalces@clinic.ub.es (C. Falces).

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Metabolic Syndrome, Diabetes, and Coronary Artery Disease: a Very Common Association

Síndrome metabólico, diabetes y enfermedad coronaria: una relación muy frecuente

To the Editor,

We read with interest Jover et al's article[1] on the prevalence of metabolic syndrome (MS) in patients with acute coronary syndrome. The authors included a subanalysis of the components of MS after excluding 265 patients with known diabetes. The main characteristic of patients with MS is the presence of insulin resistance. An association between MS and abdominal obesity, atherogenic hyperlipidemia, inflammation, and increased risk of cardiovascular disease has also been reported.[2] Insulin resistance is also one of the most important pathogenic factors in the development of diabetes mellitus and atherosclerosis, two conditions with parallel natural histories from the rise in blood insulin and fatty material to clinical hyperglycemia and acute atherothrombotic events.[3] We consider it important to highlight the relationship between MS, diabetes, and cardiovascular disease. We therefore provide new data from a recent analysis of the prevalence study of newly diagnosed diabetes in percutaneous coronary interventions (PCI) published by our group.[4]

A total of 580 patients undergoing PCI were included in a prospective study. An oral glucose tolerance test (OGTT) was performed in 83% of nondiabetic patients to establish their glucometabolic status and screen for occult diabetes. Patients in whom an OGTT was performed had a mean age of 66.5 years; 80.1% were male, 49.7% had hypertension, 35.6% were obese, 37.3% had had a previous infarction, and 76% of patients received PCI for acute coronary syndrome.

After the OGTT, 41.4% of patients were considered normoglycemic and 22.8% had newly diagnosed diabetes (blood glucose at 2 h>200 mg/dl). In total, 198 patients (58.6%) had some alteration in carbohydrate metabolism and abnormal glucose regulation. Based on International Diabetes Federation (IDF) criteria, the prevalence of MS in the study population was 59.9%. This figure compares to one of 51.3% obtained using the Adult Treatment Panel III (ATPIII) criteria and a figure of 42.6% using World Health Organization (WHO) criteria. Of patients undergoing PCI, 28.4% met all 3 criteria for MS.

The prevalence of newly diagnosed diabetes was higher among patients with MS, regardless of the criteria used: IDF, 31% vs 13.3% ($P<.001$); WHO, 42.7% vs 13% ($P<.001$); ATPIII, 32.5% vs 14.5% (odds ratio [OR]=3.4, $P<.001$). A multivariate analysis to determine the independent association between MS and newly diagnosed diabetes gave the following results after adjusting for age, sex, and clinical and laboratory variables: IDF criteria, OR=3.3 (95% confidence interval [95%CI], 1.7 to 6.3, $P<.001$); WHO, OR=5.5 (95%CI, 3.1 to 9.9, $P<.001$); ATPIII OR=3.4 (95%CI, 1.9 to 6.1, $P<.001$). There was therefore a clear and strong relationship between newly diagnosed diabetes and MS, regardless of the diagnostic criteria used.

Data from this study reinforce those reported by Jover et al.,[1] which also indicated a high prevalence of MS in patients with coronary disease. They also provide further evidence of the strong relationship between MS and newly diagnosed diabetes. The presence of MS or a high score on a model proposed by our group[5]

help us identify patients at high risk for occult diabetes who need an OGTT. The incorporation of a new diagnosis of diabetes will help to improve the residual risk mentioned by Jover et al.[1] by optimizing secondary prevention in these patients.

José M. Vegas-Valle,[a,*] José M. García-Ruiz,[b,c]
Ernesto Hernández-Martín,[a] and Jesús M. de la Hera[c]

[a]*Servicio de Cardiología, Hospital de Cabueñes, Gijón, Asturias, Spain*
[b]*Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III, CNIC, Madrid, Spain*
[c]*Servicio de Cardiología, Hospital Universitario Central de Asturias, Oviedo, Asturias, Spain*

*Corresponding author:
E-mail address: josemivv@secardiologia.es (J.M. Vegas-Valle).

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An Opportunity to Know About Resistant Hypertension in our Area

Una oportunidad para conocer la hipertensión arterial refractaria en nuestro medio

To the Editor,

We read with interest the article by Llisterri et al.[1] regarding blood pressure control in our primary care setting in hypertensive women older than 65 years. The authors report that there is room for improvement in this regard despite the extensive use of combined therapy (3 or more drugs in 21.7% of the sample) and cite several reasons for the differences observed, including poor metabolic control and abdominal obesity. It is noteworthy that the presence of metabolic syndrome was not associated with poor blood pressure control, despite the great difference in the prevalence of this factor between the groups studied.

Our interest arises from a previous registry (HIPERFRE) on resistant hypertension including 1724 patients and carried out by general practitioners in an area of northwest Galicia.[2] Although the study included both sexes (58.4% were women), the analysis of the population of women older than 65 shows entirely reproducible data. The degree of blood pressure control was higher in this cohort (40.8%) than in Llisterri's study, and 13.5% of patients had resistant hypertension. Our attention is focused on this finding because, as is known from related guidelines,[3] the exact prevalence of this condition is unknown. Resistant hypertension is defined as poor blood pressure control in patients treated with at least 3 drugs, one of which is a diuretic.

Studies such as Llisterri's[1] and the recent CARDIOTENS 2009[4] provide a good opportunity to have access to data on this relatively frequent condition. Although this information was not reported in either study, the percentage of patients with resistant hypertension (ie, the percentage of those receiving 3 or more antihypertensive drugs and experiencing poor blood pressure control) was surely less than 12.5% in MERICAP. It would be of interest to have an approximate estimate and to know whether resistant hypertension was associated with obesity, diabetes mellitus, and metabolic syndrome, as was seen in HIPERFRE.

Rafael Vidal-Pérez,[a,*] Fernando Otero-Raviña,[b]
Ricardo Besada Gesto,[c] and José Ramón González-Juanatey[a]

[a]*Servicio de Cardiología, Hospital Clínico Universitario de Santiago, Santiago de Compostela, A Coruña, Spain*
[b]*Sección de Coordinación Asistencial, SERGAS, Santiago de Compostela, A Coruña, Spain*
[c]*Centro de Salud de Rianxo, A Coruña, Spain*

*Corresponding author:
E-mail address: rafavidal@hotmail.com (R. Vidal-Pérez).

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