Letters to the Editor

Comorbidity in Patients Admitted to a Department of Cardiology Due to Heart Failure

Comorbilidad de los pacientes ingresados por insuficiencia cardiaca en un servicio de cardiólogía

To the Editor,

Understanding the factors that can affect the prognosis of patients admitted into hospital due to heart failure and the resources used during their treatment is becoming more relevant. Therefore, recent multi-center data from various Spanish hospitals have been analyzed for the impact of comorbidity on the development of heart disease in patients who have been admitted to internal medicine units. The authors detected other conditions in 60% of heart disease patients, which is described as comorbidity and, although this was not associated with the multivariable analysis, they concluded that the increase in comorbidity measured by the Charlson’s index (Chi) is linked to greater levels of mortality.

According to clinical records, in 2008, 130 patients suffering from DRG-127 (diagnosis-related group, heart failure and shock) were admitted in the cardiology department of our tertiary hospital. We analyzed hospital stays longer than the standard 7.9 days in relation to different variables. The age was 71.5 years (median), 48.5% were female and they were described as pluripathological patients (with 2 or more conditions), using the definition of an expert committee. A series of patients admitted to internal medicine units showed a prevalence of pluripathology in 42% of the cases. Concomitant diseases were: 25% of a rheumatic nature or chronic kidney failure (II); 33.8% respiratory (III); 4.4% chronic inflammatory intestinal disease or hepatopathy (IV); 16% neurological (V); 11.8% peripheral arteriopathies or diabetes mellitus with visceral repercussions, excluding the coronary (VI); and 14.7% secondary oncological or hematic conditions not requiring specialist treatment (VII). Of these patients, 87% were pluripathological and 69% had been previously admitted to the unit; 48.5% suffered from auricular fibrillation and 32.4% from anemia. By logistical regression analysis, a hospital stay longer than 7.9 days was only associated with auricular fibrillation (odds ratio [OR] = 2.48; 95% confidence interval [CI], 0.88–6.99; \(P = .04\)) or anemia (OR = 3.4; 95% CI, 1–11; \(P = .02\)), conclusions which were similar to those of other authors.

Chi has been questioned as an indicator of comorbidity because it only estimates life expectancy, as each category is associated with an adjustment based on 1-year mortality risk. Nevertheless, the classification we used takes into account the effects of comorbidity on the biology of the patient. In our series, we did not find any relationship between comorbidity and hospital mortality, probably due to the size of the sample and the methodology applied. It has been stated that patients referred to cardiology units suffer less comorbidity. Our analysis reveals a high level of comorbidity in admitted heart disease patients who were subsequently monitored as heart disease outpatients and their comorbidity had no repercussions related to long hospital stays.

Manuel de Mora-Martín,* José M. Pérez-Ruiz, José L. Delgado-Prieto, and Cristóbal A. Urbano-Carrillo
Servicio de Cardiología, Hospital Universitario Carlos Haya, Málaga, Spain
* Corresponding author.
E-mail address: manuel.mora@telefonica.net (M. de Mora-Martín).

Available online 15 December 2010

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doi:10.1016/j.jrec.2010.05.004

Heyde’s Syndrome

Síndrome de Heyde

To the Editor,

Heyde’s Syndrome is described as an association between aortic stenosis and bleeding due to intestinal angiodysplasia. This hemorrhagic syndrome has been linked to an acquired deficit of Type IIa von Willebrand factor.

We present the case of an 89-year-old woman with a personal history of hypertension, dyslipidemia and known, but unstudied, systolic murmur. She came to the accident and emergency department due to an episode of syncope and melena. On laboratory analysis hemoglobin values were found to be 6.4 g/dL with a hematocrit of 18%. In view of these results, the patient needed a transfusion and was admitted so that the anemia could be

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studied. An abdominal contrast computed tomography, colonoscopy and oral endoscopy were performed, but the bleeding site was not found. As hemorrhage persisted and repeated transfusions were necessary, emergency surgery was performed. During surgery, intraoperative endoscopy was performed, and the bleeding site was found in the proximal ileum. A corresponding intestinal resection was carried out at that level. A pathology study found the resected tissue to be compatible with intestinal angiodysplasia (Fig. 1). The patient progressed favorably, and on discharge was referred to the Cardiology Department so that her murmur could be studied. An echocardiogram was requested and showed a calcified aortic valve with a maximum gradient of 75 mm Hg, a mean gradient of 38 mm Hg and an effective area of 0.7 cm², all of which is compatible with severe aortic stenosis (Fig. 2). It also showed a non-dilated left ventricle with slight hypertrophy and preserved systolic function. An enhanced coagulation study was requested, including platelet function and measurement of the function and
Angiodysplasia is a degenerative disease of the intestinal mucosa related to the aging process and one of the main causes of gastrointestinal bleeding in the elderly. Its association with aortic stenosis is well known. Many mechanisms have been considered to explain this syndrome; currently the most prominent is an acquired deficit of Type IIa von Willebrand factor, characterized by a loss of the largest VWF multimers, although this causal relationship cannot always be demonstrated, as in this case.

Von Willebrand factor is a high-molecular-weight multimeric protein secreted by endothelial cells that stimulates platelet adhesion and aggregation when there is vascular damage. These multimers are cleared by plasma proteases that are especially active in turbulent blood flow situations.

In aortic stenosis, fragmentation of VWF multimers is increased, which reduces their number and predisposes bleeding. Studies have reported that these coagulation anomalies are directly related to the severity of aortic stenosis and are reversible after valve replacement if successful, so that recurrence of bleeding could be an indication of persistent stenosis. Therefore, although in some cases of extensive bleeding, such as this one, intestinal resection is necessary, many authors have shown that gastrointestinal bleeding ceases after valve replacement, being even more likely to prevent recurrences than intestinal resection.

Heyde’s Syndrome is an entity to be kept in mind, even more nowadays with an aging population, when assessing patients with a history of bleeding or anemia, especially when the bleeding site is not found on initial examination. Based on this data, we propose the hypothesis that this association could be a new indication for valve replacement; however, gastrointestinal bleeding is not used as an indicator in current clinical practice guides.

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doi:10.1016/j.rec.2010.06.009