Comorbilidad de los pacientes ingresados por insuficiencia cardíaca en un servicio de cardiología

To the Editor,

Understanding the factors that can affect the prognosis of patients admitted into hospital due to heart failure and shock 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 pluriopathy 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 hematemic 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.

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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

Figure 1. Histological preparation of the colon wall in which thin-walled endothelial-lined vessels with ectasia are seen (H–E, ×10 and ×120).

Figure 2. Image of aortic short axis transthoracic echocardiogram showing thickening of valve leaflets with restricted opening and with continuous Doppler showing elevated transvalvular gradients.
Spontaneous Coronary Dissection: Role of Intravascular Ultrasound

Disección coronaria espontánea: papel del ultrasonido intravascular

To the Editor,

A 49-year-old woman with no cardiovascular risk factors was admitted to our department with high-risk non-ST-elevation acute coronary syndrome. Coronary angiography revealed severe stenosis in a segment located in the middle portion of the anterior descending artery, with no evidence of other lesions (Fig. 1). Given the ambiguity of the angiogram and the absence of risk factors, we decided to perform intravascular ultrasound, which revealed localized dissection that had not been visible in the angiogram (Fig. 1). There was no apparent intimal rupture but there was evidence of hematoma within the intima. Given the lack of information on the course of the lesion, and since it was located in the anterior descending artery of a young woman, we decided to perform angioplasty with implantation of a drug-eluting stent, with excellent angiographic results (Fig. 2).

Spontaneous coronary artery dissection is a rare cause of acute coronary syndrome (ACS) and sudden death. It has traditionally been described in 3 groups of patients 1: patients with coronary artery disease, women during the peripartum period, and a heterogeneous group of patients with idiopathic disease, comprising individuals without cardiovascular risk factors, those with connective tissue disorders (Marfan syndrome, Ehlers–Danlos syndrome, etc.), and cases of intoxication.

There is a clear predominance of women (80% of cases), with a mean age at presentation of 40 years and 25% of cases occurring in the peripartum period. The overall incidence ranges from 0.1% to 1.1%. 2 The most commonly affected artery is the anterior descending, whereas in men the right coronary artery is more often affected. 1, 2 Cases of multivessel dissection and of left main coronary artery dissection have also been described.

The pathophysiology involves hemorrhage between the medial layer and the external elastic lamina, leading to separation of the layers, expansion of a false lumen, and compression of the native lumen that results in ischemia. 2 Rupture and hemorrhage of the vasa vasorum has been suggested as a potential mechanism. 2, 3 Eosinophilic infiltrates have also been observed in the dissected region, suggesting a possible inflammatory or vasculitic mechanism, 2, 3 although some authors maintain that the presence of inflammatory cells is a consequence rather than a cause of the dissection. The association with the peripartum period and the use of oral contraceptives supports the hypothesis that the condition occurs as a result of connective tissue changes induced by hormones (endogenous or exogenous) and the hemodynamic changes characteristic of pregnancy. Numerous cases have also been reported in association with acute changes in intrathoracic pressure. 3 Nevertheless, in many patients, no clear trigger is observed and it is likely that there are multiple etiologies.

Diagnosis is based on observation of a radiolucent intimal flap in the coronary angiography. Diagnosis using angiography alone is often difficult when there is no apparent intimal rupture, with no