

Profiles of hospitalized patients with valvular heart disease: Experience of a tertiary center

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Abstract

Introduction

Valvular heart disease (VHD) is increasing worldwide, mostly because of aging. Percutaneous valve intervention is the preferred therapeutic option in high-risk patients.

Objective

To characterize the profiles of patients with VHD admitted to the cardiology ward at a tertiary referral center.

Methods

On the basis of ICD-9 codes for VHD, the discharge notes of 287 patients hospitalized over a 22-month period were reviewed and analyzed. One hundred characteristics were considered.

Results

Median age was 74 (23-93) years, and 145 (51%) were male. The admissions were elective (for valve intervention) in 36%. Heart failure (HF) was the reason for urgent admissions in 29.3%. Multiple comorbidities were observed in 53% of patients. Etiology of VHD was degenerative in 68%, functional in 15.3% and rheumatic (predominantly in women and younger patients) in 8.7%. Aortic valve disease was present in 63% (aortic stenosis in 56%), and was associated with HF ($p=0.004$), atrial fibrillation (AF) ($p=0.01$), and left ventricular (LV) dilatation ($p=0.003$) or hypertrophy ($p<0.001$). Mitral valve disease (51%), mostly mitral regurgitation (degenerative or functional), predominated in women, and was associated with HF, AF, LV dilatation ($p<0.001$) and reduced LV ejection fraction ($p=0.003$). Significant tricuspid regurgitation (34.8%) associated with the presence of previously implanted cardiac devices ($p<0.001$). Valve intervention (mostly transcatheter aortic valve implantation) was performed in 41% of patients. Mean length of hospital stay was 12 ± 14.3 days and overall in-hospital mortality was 9.8%.

Conclusions

Nowadays, the profiles of hospitalized patients with VHD are dominated by the elderly, with degenerative disease and multiple comorbidities, presenting with HF, AF and LV remodeling, who frequently undergo valve intervention, usually via a percutaneous approach. Mortality remains significant in this high-risk population.

Keywords

Aortic stenosis; Doença valvular cardíaca; Epidemiologia; Epidemiology; Estenose aórtica; Hospitalization; Hospitalização; Mitral regurgitation; Regurgitação mitral; Valvular heart disease.