Abstract: 676

Left bundle branch block and acute coronary syndrome, old association in the new era

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Introduction
Acute coronary syndrome (ACS) in the setting of left bundle branch block (LBBB) remains an important diagnostic and therapeutic challenge although emergent coronary angiography is recommended by current guidelines.

Purpose
The aim of this study is to analyze the baseline characteristics and the angiographic findings observed in patients presenting with an ACS and LBBB who underwent urgent catheterization.

Methods
This single centre observational retrospective study included a consecutive cohort of patients from July 2011 to February 2018 with an ACS diagnosis with either LBBB or ST elevation (STE). After the initial evaluation, a propensity score matching 4:1 with 0.1 caliper was performed.

Results
1089 patients were analyzed, 4.13% of them presented with LBBB. The mean age was 62,3±12.8. 24% were women. Patients with LBBB had more comorbidity: they were older (LBBB 70.3 vs STE 62.4 p< 0.001), had more hypertension (LBBB 84% vs STE 56%, p<0.001), dyslipidaemia (LBBB 62% vs STE 44%, p = 0.049) renal failure (LBBB 11% vs STE 3%, p=0.022) or previous cerebrovascular events (LBBB 22% vs STE 6%, p<0.001). Coronary artery occlusion was less frequent in the LBBB group (LBBB 41% vs STE 81%, p=0.001) although three-vessel disease or left main disease was more frequent (LBBB 30% vs STE 12% p =0.001).

After propensity score matching of the baseline characteristics, two homogeneous groups were obtained (43 LBBB, 133 STE). Even after this adjustment, to find an occluded artery in the catheterization lab was less probable in the group of patients with LBBB (odds ratio [OR] 0,19; IC 95% 0.089-0.387 p<0.001).

Conclusions
In the present study, less than a half of the patients with LBBB who underwent urgent primary coronary intervention had an occluded artery. This tendency remained even after the adjusted analysis. New studies are needed to discriminate the patients with LBBB to whom an urgent treatment could benefit the most.