THE ROLE OF IVABRADINE IN PATIENTS UNDERGOING CARDIAC REHABILITATION FOR RECENT CORONARY SURGERY

Poster Contributions
Hall C
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Session Title: Cardiac Rehabilitation: Correlates of Favorable Outcomes
Abstract Category: 22. Prevention: Rehabilitation
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Background: The purpose of this study was to evaluate the efficacy of adding Ivabradine to β-blockers during cardiac rehabilitation in patients with recent coronary artery bypass (CAB).

Methods: Between June 2012 and June 2013, 81 out of 150 patients, admitted at our Cardiac Rehabilitation Unit after a median interval time of 10 days from CAB, were scheduled for this prospective randomized study according to the following criteria: normal LVEF, sinus rhythm, heart rate >70 bpm, stable clinical condition.

The patients were randomized into two groups: Group I (n=38): Ivabradine (5 mg bid) + β-blocker (bisoprolol 1.25 mg od) and Group B (n=43): β-blocker (bisoprolol 2.5-5mg od). All the patients were evaluated at admission, discharge, and after 3 months of follow-up.

Results: The ejection fraction improved significantly in Group I, both at discharge and follow-up. In Group I, patients showed a significantly impaired functional status at 6-minute walking test (6MWT), that improved during cardiac rehabilitation and at follow up; the percentage improvement of distance during 6MWT was significantly higher in Group I (55% vs 42% after 3 months). Finally, the rate of diastolic dysfunction increased significantly in Group B, but decreased significantly in Group I.

Conclusion: In patients submitted to recent CAB, adding Ivabradine to low dose of β-blockers, throughout cardiac rehabilitation, might improve the recovery of systolic function and exercise capacity, and reduce the rate of diastolic dysfunction.

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<th>Table 1</th>
<th>Baseline</th>
<th>Discharge</th>
<th>Follow-up</th>
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<tbody>
<tr>
<td></td>
<td>I</td>
<td>B</td>
<td>I</td>
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<tr>
<td>LV ejection fraction (%)</td>
<td>57±3</td>
<td>57±3</td>
<td>59±4</td>
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<td>6MWT (meters)</td>
<td>215±53</td>
<td>180±91*</td>
<td>314±32</td>
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<td>Diastolic dysfunction</td>
<td>Grade I</td>
<td>63%</td>
<td>58%</td>
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<td></td>
<td>Grade II</td>
<td>13%</td>
<td>19%</td>
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<td>Δ (baseline-discharge)</td>
<td>Δ (discharge-follow up)</td>
<td>Δ (baseline-follow up)</td>
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<tr>
<td>Covered distance (%)</td>
<td>120 (80-170)</td>
<td>100 (80-130)</td>
<td>40 (8-88)</td>
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