PP-055

The Relationship between Heart Failure Stage/Symptom Class and Depression

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Background: Depression/depressive disorders are commonly encountered psychiatric disorders. There is no data regarding the relationship between this commonly seen situation and heart failure stage/class.

Aim: The aim of this study is to evaluate the relationship between various stages of depression/depressive disorders and heart failure stages/classes.

Methods: A total of consecutive 419 patients with a mean age of 57.9 ± 14.4 years (age range: 16-96 years) admitted with the symptoms of heart failure were included in the study. Beck’s depression inventory, including 21 evaluation sentences was applied to all study participants to measure the level and severity of depression symptoms of persons. Measured total scores were used to grade the severity as minimal (0-10), mild (11-16), moderate (17-29), and severe (30-63).

Results: Two hundred and nineteen patients (52.3%) were male, 247 (58.9%) had hypertension, 139 (33.2%) had diabetes, and 248 cases (59.2%) had coronary heart disease. Stage A heart failure was present in 113 patients (27.0%), stage B in 119 patients (28.4%), stage C in 116 patients (27.7%), and stage D in remaining 71 cases (16.9%). With regard to NYHA classification, 228 patients (54.4%) had class I symptoms, 101 (24.1%) had class II symptoms, 31 (7.4%) had class III symptoms, and class IV symptoms were found in remaining 59 patients (14.1%). The mean left ventricular ejection fraction of all population was 54.2% ± 12.4 and the mean Beck’s depression score was 12.4 ± 11.1. It has been found that there was a significant positive relation between both heart failure stage and symptom class and depression score. In addition, with increasing severity of heart failure stage and symptom class the severity of depression increased (table). In univariate regression analysis, heart failure stage, age, marital status, income level, education level, NYHA class, and beta blocker use were risk factors for moderate-severe depression. In multivariate regression analysis, just heart failure stage (OR 4.99 and 95% CI 2.03-12.24, p < 0.001) were, however, determined as independent variables.

Conclusion: Heart failure stage and symptom class were positively and independently associated with the score and severity of depression.

Heart failure stage

<table>
<thead>
<tr>
<th>Depression score</th>
<th>Stage A</th>
<th>Stage B</th>
<th>Stage C</th>
<th>Stage D</th>
<th>P value for trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYHA class</td>
<td>NYHA I</td>
<td>NYHA II</td>
<td>NYHA III</td>
<td>NYHA IV</td>
<td></td>
</tr>
<tr>
<td>Depression score</td>
<td>3.6 ± 4.3</td>
<td>5.3 ± 5.2</td>
<td>19.5 ± 7.9</td>
<td>25.4 ± 9.7</td>
<td>&lt;0.001</td>
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</tbody>
</table>

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Prognostic Role of Hematologic Parameters in Heart Failure Patients with Incidental Massive Pleural Effusion Diagnosed During Echocardiographic Evaluation

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Aim: The prognostic significance of patients with heart failure complicated with pleural effusions determined by means of echocardiography is lacking. Thus we sought to determine the prognostic significance of hematologic parameters at heart failure patients with pleural effusion which was evaluated incidentally during echocardiographic evaluation.

Methods: Between Jan 2002 and Dec 2012, total 151 patients with heart failure suffered from pleural effusion analysed. All patients mortality data are derived from registry center of Social Insurance Institution which officially responsible for recording all mortality data in Turkey. The diagnosis of patients’ pleural effusion status were made during echocardiographic evaluation. We also evaluated hematological parameters including creatinine, uric acid, albumin, sodium, potassium, hemoglobin at the time of hospital admission. Kaplan-Meier survival rates were determined and subgroups were compared with log-rank test and Chi-square test.

Results: Total 151 eligible patients were analysed. Mean age was 60.1±16. Male/ Female ratio was 97/54. Mean duration of follow-up was 71.5 ± 45.6 months. Fifty-one patients (33.8%) died during this follow-up period. There was not a significant difference regarding age and sex between survivors and those who had died during follow-up. There were no prognostic significance of creatinine, uric acid, and potassium levels. (p>0.05). However, albumin, sodium and hemoglobin levels were associated with poor prognosis (p=0.001, p=0.001, and p=0.009, respectively).

Conclusion: Blood albumin, sodium, and hemoglobin levels have a worse prognostic significance in patient with heart failure complicated with pleural effusion determined by means of echocardiography.