A systematic review on currently available data on the association between geriatric impairments and hematological malignancies

Literature research: 4629 citation (832 from MEDLINE; 3797 from EMBASE)

- n=8 Acute myeloid leukemia and/or myelodysplastic syndromes
- n=2 Chronic lymphocytic leukemia
- n=13 Lymphoma
- n=7 Multiple myeloma
- n=15 Various hematological malignancies

54 publications from 44 studies

Patients with hematological malignancies, median age 73 (58-86) years

Prevalence of geriatric impairments

<table>
<thead>
<tr>
<th>Impairment</th>
<th>Prevalence</th>
<th>Univariate analysis</th>
<th>Multivariate analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polypharmacy</td>
<td>51% (17-80%)</td>
<td>No association</td>
<td></td>
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<tr>
<td>Risk of malnutrition</td>
<td>44% (27-82%)</td>
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<tr>
<td>Activities of daily living (ADL)</td>
<td>18% (4-67%)</td>
<td>67%</td>
<td>40%</td>
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<tr>
<td>Instrumental IADL impairment</td>
<td>37% (3-85%)</td>
<td>74%</td>
<td>62%</td>
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<tr>
<td>Physical capacity</td>
<td>27% (3-80%)</td>
<td>63%</td>
<td>50%</td>
</tr>
<tr>
<td>Symptoms of depression</td>
<td>25% (10-94%)</td>
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</tr>
<tr>
<td>Cognitive impairment</td>
<td>17% (0-44%)</td>
<td>55%</td>
<td>50%</td>
</tr>
<tr>
<td>Social support</td>
<td>20% (7-54%)</td>
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</tbody>
</table>

Patients with at least one geriatric impairment 51% (9-82%

Association between geriatric impairments and mortality

Univariate analysis

- Polypharmacy: 51% (17-80%)
- Risk of malnutrition: 44% (27-82%)
- Activities of daily living (ADL) impairment: 18% (4-67%)
- Instrumental IADL impairment: 37% (3-85%)
- Physical capacity: 27% (3-80%)
- Symptoms of depression: 25% (10-94%)
- Cognitive impairment: 17% (0-44%)
- Social support: 20% (7-54%)

Multivariate analysis

- Polypharmacy: No association
- Risk of malnutrition: No association
- Activities of daily living (ADL) impairment: 67%
- Instrumental IADL impairment: 74%
- Physical capacity: 63%
- Symptoms of depression: 62%
- Cognitive impairment: 55%
- Social support: 50%

27/29 studies showed a significant association between at least one geriatric impairment and mortality

Scheepers et al., Haematologica, 2020