HEALTH-RELATED QUALITY OF LIFE (HRQOL) IN SPLENECTOMIZED IMMUNE THROMBOCYTOPENIA (ITP) PATIENTS – A TARGETED LITERATURE REVIEW

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OBJECTIVES

• Immune thrombocytopenia (ITP) is associated with a risk of spontaneous and excessive bleeding.1,2
• Among the treatment options are medical therapies and splenectomy – a major intervention with lifelong consequences for the patient.1,2
• Both ITP and ITP-treatment may impact health-related quality of life (HRQOL); therefore, a literature search was conducted to assess HRQOL of splenectomized compared to non-splenectomized ITP patients.

RESULTS

• Of the four studies using the ITP-PAQ, two reported no difference3,6 and two found worse HRQOL in splenectomized versus non-splenectomized patients (see Figure 2).7,8
• As the studies using ITP-PAQ vary highly in patient numbers and show a high heterogeneity in patient characteristics, outcomes need to be interpreted with caution as differences did not always reach clinical relevance in every scale between splenectomized and non-splenectomized patients.5,6,7,8
• George et al. identified significant differences in baseline HRQOL levels in six scales (symptoms, bother, activity, fear, social activity, and women’s reproductive health) in non-splenectomized compared to splenectomized patients.7
• In the only study that included both generic (SF-36, EQ-5D) and ITP-specific measures, the generic measure scores were similar for splenectomized and non-splenectomized patients and the ITP-specific measure scores were worse for splenectomized patients.8
• Detailed results were not provided in all studies and HRQOL was not reported according to response therapy in any study.

Table 1: Results of literature search

<table>
<thead>
<tr>
<th>Reference</th>
<th>Population analyzed in the publication (Number of patients)</th>
<th>Instrument used</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathias et al. 2007a</td>
<td>ITP-patients from various disease stages (N=73)</td>
<td>ITP-PAQ</td>
<td>No actual results shown</td>
</tr>
<tr>
<td>Snyder et al. 2008</td>
<td>ITP-patients (N=1,002) vs. healthy controls (N=1,031)</td>
<td>SF-36, EQ-5D, ITP-PAQ</td>
<td>It is stated that study did not detect statistically significant differences between splenectomized and non-splenectomized patients</td>
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<tr>
<td>Snyder et al. 2009</td>
<td>ITP-patients had worse QoL compared to healthy controls</td>
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<tr>
<td>George et al. 2009</td>
<td>Splenectomized (N=63) vs. non-</td>
<td>ITP-PAQ</td>
<td>At baseline, ITP-PAQ in splenectomized patients was significantly worse than in non-splenectomized patients in 7 of 10 scales</td>
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<tr>
<td>Kuder et al. 2012</td>
<td>Non-splenectomized (Romiplostim; N=157) vs. non-splenectomized (standard therapy; N=77)</td>
<td>ITP-PAQ</td>
<td>No actual results regarding splenectomy shown</td>
</tr>
<tr>
<td>Suvaljic et al. 2014</td>
<td>Cohort of patients with chronic ITP (N=111)</td>
<td>SF-36</td>
<td>Results regarding effects of splenectomy not actually shown</td>
</tr>
</tbody>
</table>

Figure 2: HRQOL Assessment with ITP-PAQ scale (red coloured: splenectomized patients; blue coloured: non-splenectomized patients)

CONCLUSIONS

• The impact of splenectomy on HRQOL in patients with ITP is inconclusive and inconsistently reported in the literature.
• Due to use of different instruments, diverse patient characteristics, and pooling of data among responding and non-responding patients, HRQOL in ITP-patients with or without splenectomy cannot be properly assessed at the moment.
• As most results did not reach clinical relevance, differences in HRQOL in splenectomized and non-splenectomized patients via ITP-PAQ scale cannot be generalized.
• Further studies are needed to address the question “impact of splenectomy on HRQOL in patients with ITP” within patients, where splenectomy has not failed before.
• For further investigation of HRQOL in ITP-patients it is recommended to use only one instrument (e.g. disease-specific) to estimate changes in HRQOL before and after splenectomy.

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7. George et al.: Improved quality of life for romiplostim-treated patients with chronic immune thrombocytopenia purpura: results from two randomized, placebo-controlled trials; British Journal of Haematology, 2008; 144: 409-415
8. Snyder et al.: Health-related quality of life in immune thrombocytopenia patients: results from a web-based survey; Current Medical Research and Opinion, 2008; 24(10): 2767-2776

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