Factors influencing patient's quality of life after autologous transplantation, Czech transplantation centers study


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Background

Autologous transplantation (ASCT) is used for the treatment of lymphoproliferations, in smaller degree for the treatment of some autoimmune diseases and solid tumors. We focused on patients quality of life (QoL) after ASCT, especially on patients suffering from lymphoproliferative disease in our work. We consider this study as very unusual data because long-term data about patients quality of life are missing.

Methods

There were 869 patients (incorporated in our study) (410 women [47%] in [549 men [53%]] with age median 55.2 (10.5-70.6) before ASCT with following diagnoses: 401 pts (46%) non-Hodgkin’s malignant lymphomas, 318 pts (37%) multiple myelomas. 74 (9%) pts Hodgkin’s disease and others (78 pts, 9%). Questionnaires complementing median after ASCT were 4-4 years (0.5-17.2). The FACT-G questionnaire (G) was used for this analysis. The questionnaire consists of four parts - physical well-being (PWB), social/family well-being (SWB), emotional well-being (EWB), and functional well-being (FWB). The patients completed the QoL before the transplantation (at the time of indication or at the time of admission to SCT). Patients were divided into groups - before SCT (207), 1-2 years (100 patients up to 72), 1-2y (53), 2-3y (88), 3-5y (142) and more than 5 by (217). The clinical characteristics were obtained from national transplant registry DB; the data were cleaned and updated. Wilcoxon and Kruskal-Wallis test were used for statistical analysis. There was no formal control done, but for control we have used the Australian data of normal responders with 86.6 for total FACT-G (Holzner 2004).

QoL questionnaire FACT-G

<table>
<thead>
<tr>
<th>Period</th>
<th>n(%)</th>
</tr>
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<tbody>
<tr>
<td>beforeASCT</td>
<td>207 (23)</td>
</tr>
<tr>
<td>100-days &lt; 1 y</td>
<td>72 (8)</td>
</tr>
<tr>
<td>+1 &lt; 2 y</td>
<td>93 (11)</td>
</tr>
<tr>
<td>+2 &lt; 3 y</td>
<td>88 (9)</td>
</tr>
<tr>
<td>+3 &lt; 5 y</td>
<td>142 (16)</td>
</tr>
<tr>
<td>+5 y</td>
<td>287 (33)</td>
</tr>
</tbody>
</table>

Timepoints of questionnaires completion (n = 869)

<table>
<thead>
<tr>
<th>Disease status in MM, NHL, HL (n = 795)</th>
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<tbody>
<tr>
<td>CR</td>
</tr>
<tr>
<td>PR</td>
</tr>
<tr>
<td>resist/relapses</td>
</tr>
<tr>
<td>UNK</td>
</tr>
</tbody>
</table>

Results

The QoL measured by FACT-G was 73.9 points of the total 108 before ASCT and it has been significantly (<0.01) improved during time after ASCT. It was due to the PWB and FWB (<0.0001) and <0.001 resp.). It was observed in NHL as well HL subgroups, there was however no significant improvement in MM subgroup. In fact there was decrease from score 77.1 at 1 y to score 70.9 among the pts > 5 y. The QoL FACT-G was influenced by age, diagnosis and relapses. The FACT-G score among long-term survivors (> 5 y) was however lower (79.0) compared to the published data (86.6).

FACT-G ASCT (n = 836)

FACT-G ASCT MM, NHL and HL (n = 759)

Cohort comparison

Acknowledgement

Czech National SCT registry
Marie Trnkova
Katerina Benesova

University Hospital KRV Prague
Jan Novak
Sarka Hrabotova
Tomas Kozak

University Hospital Plzen
Katarina Skurinova
Alexandra Jungova
Vladimira Kozul

Charles Univ Gen Hosp Prague
Marin Trmy
Blanka Vackova
Marie Trnkova

University Hospital Motol Prague
Petr Sudolik
Petra Kostova
Ales Lada
Jan Stary

Institute of Haematology Prague
Vivica Vklaskova
Katerina Wosmanova
Petra Celkovary

University Hospital Brno
Zdenek Kralovskal
Martina Jerabkovska
Jan Mayer

University Hospital Olomouc
Ludmila Rupi
Vladimir Kapasa
Karel Indrak

Value Outcomes Prague
Tommaso Dallape
Karl Kruntoradova

University Hospital Hradec Kralove
Mirian Lanskova
Karolina Dostalekova
Pavel Dvora
Ladislav Jednov

Supported by grant IGA Czech Ministry of Health Nr 11293-6/2010