International benchmarking of severe complications related to blood donation

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Dear Editor,

With the purpose to get data feasible for international benchmarking, we have redefined the cases in our blood donor complication register according to the new standard [1]. We focused especially on the severe cases, which are more exactly defined than the total group of complications and most important for the donor. As mentioned in the standard, at the border between mild and no complication, there will be a gradual transition of severity of the symptoms, and the border will not be at the same level in different settings, causing a variation in numbers of mild complications.

The new material consists of 443 cases from 2000–2007 which were severe and with the imputability definite or probably (Table 1). The total number of donations in this period was 2 942 734. This gives a rate of 15 severe complications per 100 000 donations, out of which 13 were local complications and only two related to a vasovagal reaction. Most of the complications (66%) belong to the category pain.

Cases with long-term morbidity (LTM) defined as cases with symptoms for more than a year consisted of 138 (31%) of the 443 severe cases, which gives an LTM rate of 4.7. Also among these, the majority (94%) belong to the category pain (rate 4.4). The categories vasovagal reaction, arterial puncture and thrombophlebitis all had a rate of < 1, respectively.

Vasovagal reaction is the far most frequent and discussed of all complications, irrespective of severity, but this first set of data categorized according to the new international standard draw, like our earlier results [2], attention to the cases with local pain for more than 1 year. These complications are important for the donor as they have a high and long-lasting impact on donor’s quality of life.

Therefore, to increase focus on this important kind of complication, often not detected nor treated, national data should be bench marked with the aim to contribute to efforts to increase safety of blood donors worldwide, to get a more relevant care of donors and thereby fulfil our obligations as bleeding facilities with a high professional standard.

We look forward to the presentation of data from other countries.

Table 1 National occurrence of severe complications related to 2 942 734 blood donations in Denmark in the years 2000–2007. The numbers are given as total number and rate per 100 000 donations (in brackets)

<table>
<thead>
<tr>
<th>Severity grade</th>
<th>Severe</th>
<th>LTM</th>
</tr>
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<tbody>
<tr>
<td>Haematoma</td>
<td>54 (1.8)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Arterial bleeding</td>
<td>7 (0.2)</td>
<td>2 (&lt; 0.1)</td>
</tr>
<tr>
<td>Pain</td>
<td>290 (9.9)</td>
<td>129 (4.4)</td>
</tr>
<tr>
<td>Thrombophlebitis</td>
<td>3 (0.1)</td>
<td>1 (&lt; 0.1)</td>
</tr>
<tr>
<td>Local infection</td>
<td>24 (0.8)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Vasovagal reaction</td>
<td>65 (2.2)</td>
<td>6 (0.2)</td>
</tr>
<tr>
<td>Total</td>
<td>443 (15)</td>
<td>138 (4.7)</td>
</tr>
</tbody>
</table>

LTM, long-term morbidity.

References

Received: 29 April 2010, accepted 3 May 2010

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