**BACKGROUND**

In the past, first aid handbooks for lay public were primarily based on experience and specialist knowledge. The Belgian Red Cross-Flanders decided to use an evidence-based approach when revising its first aid programme, also containing prevention advice.

**OBJECTIVES**

To provide evidence-based recommendations in a limited time span of one year for 151 topics.

**RESULTS**

During a one year period, the reviewers devoted 2 full-time equivalents (FTE) to prepare the evidence summaries. No relevant evidence was found for 49 of the 151 topics and for the other topics, the available evidence was limited. Eight expert panel meetings (3-4h) were needed to finalise the recommendations.

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**EVIDENCE-BASED GUIDELINE DEVELOPMENT**

We have chosen to report here the evidence and recommendations for syncope as a sample of one of the 151 diverse topics of the guideline. The example discussed here is the prevention of syncope by leg crossing.

**QUESTION**

In individuals who suffer from orthostatic hypotension, does leg crossing prevent transient loss of consciousness or syncope caused by acute short-term drop in blood pressure in case of feeling faint?

**LITERATURE SEARCH**

Systematic search strategy

- Database: GIN, NGC, The Cochrane Library, MEDLINE, BestBETs, EMBASE
- Specific search terms

Outcome: syncope, orthostatic hypotension; Intervention: leg, cross(ing), ...

Search strategy: If an eligible guideline or systematic review was found, we formulated draft recommendations based on this evidence. If not, we searched controlled intervention studies. When no study was retained, the search continued for cohort and case-control studies.

- One reviewer / topic
- Period: from date of inception of the database until November 2010

**In- and exclusion criteria**

Evidence that describes a single or a combination of non-pharmacological counter-pressure manoeuvres – other than crossing the legs while standing - were not retained while addressing this specific question.

**Data extraction**

**TABLE 1: EVIDENCE FOR THE QUESTION CONCERNING LEG CROSSING TO PREVENT SYNCOPE**

<table>
<thead>
<tr>
<th>REF</th>
<th>POPULATION</th>
<th>STUDY TYPE</th>
<th>COMPARISON</th>
<th>KEY RESULTS (INTERVENTION VS. CONTROL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48 patients with vasovagal syncope</td>
<td>Within subjects design</td>
<td>Leg crossing without muscle tension vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>2</td>
<td>21 patients with vasovagal syncope</td>
<td>Within subjects design</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>3</td>
<td>48 subjects in total: 27 patients with vasovagal syncope and 21 healthy subjects</td>
<td>Within subjects design</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>4</td>
<td>18 healthy subjects</td>
<td>Within subjects design</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>5</td>
<td>9 patients with orthostatic hypotension</td>
<td>Within subjects design</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>6</td>
<td>13 subjects in total: 5 patients with orthostatic hypotension and 8 healthy subjects</td>
<td>Within subjects design</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>7</td>
<td>16 subjects in total: 8 patients with sympathetic failure and 8 healthy subjects</td>
<td>Within subjects design</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>8</td>
<td>13 subjects in total: 7 patients with orthostatic hypotension and 6 healthy subjects</td>
<td>Within subjects design</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
<tr>
<td>9</td>
<td>9 healthy subjects</td>
<td>Randomized crossover trial</td>
<td>Leg crossing vs. standing</td>
<td>Significant increase of systolic and diastolic blood pressure</td>
</tr>
</tbody>
</table>

**FORMULATING RECOMMENDATIONS**

The expert panel formulated the recommendations (by consensus) while taking into account the evidence. The health benefits, side effects, and risks have been considered when formulating the recommendations.

It is recommended that leg crossing is performed to prevent syncope in case of feeling faint.

**VALIDATION OF THE GUIDELINE**

A multidisciplinary panel of 11 experts discussed the draft recommendations. Thereafter the final recommendations of the guideline were formulated.

**GUIDELINE UPDATE**

Update in 2016.