Safety of long-acting β2-agonists in asthma

In their review on the safety of long-acting β2-agonists in asthma, Rodrigo et al\textsuperscript{1} report that severe asthma-related complications were more frequent in patients receiving formoterol 24 mg twice daily (0.9%) than in those receiving formoterol 12 mg twice daily (0.4%) or placebo (0.2%) in a multicentre randomised trial.\textsuperscript{2} The original study reports different percentages of asthma-related complications in the treatment groups (table 1), and both serious asthma exacerbations and a combined outcome including serious asthma exacerbations, asthma-related discontinuations and emergency visits for asthma did not show statistically significant differences between the treatment groups.\textsuperscript{2} Consequently, the statement by Rodrigo et al\textsuperscript{1} that higher doses of formoterol are associated with an increase in serious asthma exacerbations is disputable.

Concerns about the safety of long-acting β2-agonists therapy are a matter of ongoing discussion, and a recently promoted FDA study\textsuperscript{3} may hopefully clarify the risk associated with the regular use of long-acting β2-agonists for the treatment of asthma.

Fernando Maria de Benedictis, Ines Carloni
Department of Mother and Child Health, Salesi Childrens Hospital, Ancona, Italy

Correspondence to Professor Fernando Maria de Benedictis, Department of Mother and Child Health, Salesi Childrens Hospital, Via Corridoni, 11, Ancona 60123, Italy; debenedictis@ospedaliruin.it.marche.it

Competing interests None.

Provenance and peer review Not commissioned; internally peer reviewed.

Accepted 12 April 2012

Thorax 2012;67:1. doi:10.1136/thoraxjnl-2012-201991

Table 1 Respiratory-related severe asthma exacerbations (requiring hospitalisation)

<table>
<thead>
<tr>
<th>Treatments</th>
<th>No.</th>
<th>No.</th>
<th>%</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formoterol, 24 μg twice daily</td>
<td>527</td>
<td>2</td>
<td>0.4</td>
<td>0 to 0.9</td>
</tr>
<tr>
<td>Formoterol, 12 μg twice daily plus on demand</td>
<td>517</td>
<td>1</td>
<td>0.2</td>
<td>0 to 0.6</td>
</tr>
<tr>
<td>Formoterol, 12 μg twice daily</td>
<td>527</td>
<td>5*</td>
<td>0.9</td>
<td>0.1 to 1.8</td>
</tr>
<tr>
<td>Placebo</td>
<td>514</td>
<td>1</td>
<td>0.2</td>
<td>0 to 0.6</td>
</tr>
<tr>
<td>Formoterol combined (three groups)</td>
<td>1571</td>
<td>8</td>
<td>0.5</td>
<td>0.2 to 0.9</td>
</tr>
</tbody>
</table>

*Two patients had respiratory events that were not asthma related.
Safety of long-acting \( \beta_2 \)-agonists in asthma

Fernando Maria de Benedictis and Ines Carloni

Thorax published online May 1, 2012

Updated information and services can be found at:
http://thorax.bmj.com/content/early/2012/04/30/thoraxjnl-2012-201991

These include:

References

This article cites 3 articles, 1 of which you can access for free at:
http://thorax.bmj.com/content/early/2012/04/30/thoraxjnl-2012-201991#BIBL

Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/