Changes in Measurement of Glycated Haemoglobin
Diabetes and Endocrinology

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Changes in Measurement of Glycated Haemoglobin

Glycated Haemoglobin HbA\textsubscript{1C} – information about changes in measurement

Background
Glucose in everybody’s blood sticks on to their haemoglobin inside their red blood cells making glycated haemoglobin, known as HbA\textsubscript{1C}, also called the “long term blood test”. HbA\textsubscript{1C} reflects the amount of glucose that the red blood cells have been exposed to during their life span. Measuring it helps to assess diabetes control and guides treatment. The HbA\textsubscript{1C} is proportional to the average blood glucose over the preceding four to twelve weeks.

Change in measurement
There is currently a change to the way in which the HbA\textsubscript{1C} results are being reported. The International Federation of Clinical Chemistry (IFCC) has introduced this new way of reporting so it is easier to compare results from different laboratories worldwide. The new measurement is millimoles per mol (mmol/mol) and is replacing a percentage (%).

Although the new way looks very different it is still giving us the same information as the previous method. The chart on the next page can be used to compare old results with the new results.

<table>
<thead>
<tr>
<th>Old HbA\textsubscript{1C} (%)</th>
<th>New HbA\textsubscript{1C} (mmol/mol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>42</td>
</tr>
<tr>
<td>6.5</td>
<td>48</td>
</tr>
<tr>
<td>7.0</td>
<td>53</td>
</tr>
<tr>
<td>7.5</td>
<td>58</td>
</tr>
<tr>
<td>8.0</td>
<td>64</td>
</tr>
<tr>
<td>8.5</td>
<td>69</td>
</tr>
<tr>
<td>9.0</td>
<td>75</td>
</tr>
<tr>
<td>9.5</td>
<td>80</td>
</tr>
<tr>
<td>10.0</td>
<td>86</td>
</tr>
</tbody>
</table>

At the moment (November 2011), the laboratory are reporting the HbA\textsubscript{1C} results as both old and new, but only the new results will be reported from early 2012.

Further Information
We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Advice and Liaison Service (PALS) on 01932 723553 or email pals@asph.nhs.uk. If you remain concerned, PALS can also advise upon how to make a formal complaint.

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