Frequency of Hypoglycaemia in Children and Young People’s Diabetes Clinic

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BACKGROUND
Hypoglycaemia is a common complication of diabetes (1) causing great anxiety in patients and their families. Asymptomatic hypoglycaemia can be debilitating, especially in children and young people (CYP). In our Diabetes Clinic if hypoglycaemia is identified, the hospital hypoglycaemia policy should be followed to provide safe and effective treatment.

AIM
1. Record number of patients in CYP Diabetes Clinic who presented with hypoglycaemia over a six month period.
2. Identify if patients were symptomatic or not.
3. Ascertain if hospital hypoglycaemia policy was followed.

METHODS
Retrospective analysis of patient attending the CYP Diabetes clinic records over 6 months period.

RESULTS
272 CYP attended Diabetes clinic. Of these 57 presented with hypoglycaemia (21%).

<table>
<thead>
<tr>
<th>Drug Regimen</th>
<th>No of Patients</th>
<th>Mean HbA1c</th>
</tr>
</thead>
<tbody>
<tr>
<td>BD</td>
<td>6</td>
<td>9.17</td>
</tr>
<tr>
<td>TDS</td>
<td>2</td>
<td>7.85</td>
</tr>
<tr>
<td>Pump</td>
<td>10</td>
<td>8.41</td>
</tr>
<tr>
<td>MDI Lantus</td>
<td>32</td>
<td>8.39</td>
</tr>
<tr>
<td>MDI Levenir</td>
<td>7</td>
<td>7.89</td>
</tr>
</tbody>
</table>

There was no statistical significance between insulin regime and HbA1c, matching previous literature findings (3).

No significant relationship was identified between risk of hypoglycaemia, age of patient and duration of diabetes.

Trend suggests that patients diagnosed with diabetes recently are more likely to attend clinic with hypoglycaemia.

CONCLUSIONS
38% of CYP presenting with hypoglycaemia reported a complete lack of symptoms.

50% of CYP with measured severe hypoglycaemia and reported preserved hypo awareness, reported no symptoms in clinic.

The most common reason for hypoglycaemia protocol not being followed was that own treatment choice for hypoglycaemia was taken.

Modified hypo awareness is more likely to present with severe hypoglycaemia (4) as it can often go undetected by children and their responsible adults; it remains the leading cause of severe hypoglycaemia (5).

The importance of identifying patients with hypoglycaemia unawareness/modified hypo awareness is essential for safety and improved diabetes management. The effect has been found to be reversible with as little as 2-3 weeks of avoidance of hypoglycaemia (1).

The local hospital hypoglycaemia protocol requires revision to improve usefulness and suitability to meet both the clinical needs for appropriate hypoglycaemic treatment and acceptability from those with diabetes.

REFERENCES