**Glucagon Testing of Childhood-Onset Growth Hormone Deficiency during Transition**


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**RESULTS**

**Table 1. Anthropometric and biochemical parameters**

<table>
<thead>
<tr>
<th></th>
<th>GH peak, mcg/L (ITT)</th>
<th>GH peak, mcg/L (GL)</th>
<th>IGF-1 SDS</th>
<th>BMI SDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-GHD (n=36)</td>
<td>18.6; 12.1 – 22.6</td>
<td>15.0; 10.7 – 19.5</td>
<td>0.0; –0.7 – 0.7</td>
<td>0.0; –0.7 – 0.7</td>
</tr>
<tr>
<td>O-GHD (n=18)</td>
<td>3.7; 0.1 – 6.5</td>
<td>4.2; 0.7 – 4.2</td>
<td>–2.0; –2.7 – 0.5</td>
<td>1.1; 0.3 – 1.8</td>
</tr>
<tr>
<td>CGO-GHD (n=16)</td>
<td>1.7; 0.4 – 2.8</td>
<td>1.7; 0.3 – 2.1</td>
<td>–3.2; –4.7 – 1.5</td>
<td>1.2; 0.4 – 2.3</td>
</tr>
</tbody>
</table>

**Figure 1. GH peak after GL**

**Figure 2. BMI SDS**

**Figure 3. ROC curve analyses for evaluate the best GH cut-off to GL**

**CONCLUSIONS**

- The Glucagon test is accurate in detecting permanent GHD during transition with a cut-off value for GH peak of 7.4 mcg/L.
- GH secretion remained significantly lower in CGO-GHD and O-GHD compared to I-GHD at all time points of the GL test.
- Glycemic values differed only at baseline, T30 and T180 discriminating between I-GHD and CGO-GHD.
- GH peak after GL seems inversely related to BMI SDS, in particular in groups with permanent GHD (CGO-GHD and O-GHD).

**Table 2. Correlations between GH peak to GL, GH peak to ITT, IGF-1 and BMI**

**REFERENCES**


**CONTACT INFORMATION**

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