INTRODUCTION

- Complications of obesity are well recognised and documented in the adult population
- There is little data available that reports the complications of childhood obesity seen in clinical practice

AIM

- To investigate the different types of complications seen in children and young people with obesity

METHOD

- 125 children and young people aged between 0 and 18 years were included
- All had BMI SDS > 2
- Retrospective data collection
- Complications for each patient identified

CONCLUSIONS

- 80% of our cohort had at least one complication secondary to their obesity.
- As these complications have potential to seriously impact the quality of life of these individuals in addition to long term morbidity and mortality, it is important to identify and manage these complications at an early stage along with a co-ordinated effort aimed at weight loss to mitigate the complications and co-morbidities.

RESULTS

- Mean age was 10.9 years (SD ± 3.62; range 2 - 18 years)
- 81 (65%) were female
- Mean BMI 32.9kg/m² (SD ± 6.6, range: 22.7 - 58.3)
- Mean BMI SDS +3.5 (SD ± 1.1, range: +2.06 - +7.85)
- 47% of patients had two or more complications secondary to obesity
- Further 33% had had one complication related to obesity
- 31% of patients had risk factors for type 2 diabetes mellitus (family history, acanthosis nigricans and/or insulin resistance)
- Of those who had an oral glucose tolerance test, 11.4% of the children and young people were diagnosed with pre-diabetes and 9% with T2DM
- Table 1 shows the most common complications and the percentage of patients who had each complication
- Other complications include: skin infection, slipped upper femoral epiphysis, non-alcoholic fatty liver disease, gynaecomastia and idiopathic intracranial hypertension

Table 1: Most common complications found in cohort of patients

<table>
<thead>
<tr>
<th>Most common complications</th>
<th>Percentage of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyslipidaemia</td>
<td>25</td>
</tr>
<tr>
<td>Hypertension</td>
<td>18</td>
</tr>
<tr>
<td>Mental health issues (incl depression, anxiety and self-harm)</td>
<td>18</td>
</tr>
<tr>
<td>Mobility issues</td>
<td>11</td>
</tr>
<tr>
<td>Abnormal puberty</td>
<td>10</td>
</tr>
<tr>
<td>Glycaemic dysregulation</td>
<td>6</td>
</tr>
<tr>
<td>Obstructive sleep apnoea (diagnosed or symptoms suggestive of)</td>
<td>21</td>
</tr>
<tr>
<td>Polycystic ovary syndrome (diagnosed or symptoms suggestive of)</td>
<td>18</td>
</tr>
</tbody>
</table>

CONTACT INFORMATION

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